

Division 245

CLEANER AIR OREGON

340-245-0005

Purpose and Overview

(1) The purpose of Oregon’s risk-based toxic air contaminant permitting program, known as Cleaner Air Oregon, is to:

- (a) Prioritize and protect the health and well-being of all Oregonians;
- (b) Analyze public health risk due to toxic air contaminant emissions from industrial and commercial sources based on verified science and data;
- (c) Consider similar regulations in other states and jurisdictions and use a science-based, consistent and transparent process for communicating and addressing the risk due to industrial and commercial emissions of toxic air contaminants, provide regulatory predictability to businesses and the communities they are a part of; and
- (d) Reduce exposure to industrial and commercial toxic air contaminant emissions while supporting an environment where businesses and communities can thrive.

(2) The long-term goal of Cleaner Air Oregon is to achieve a 50% reduction in the number of existing facilities posing either an excess cancer risk of more than 25 in a million or a Hazard Index of more than 1 by the year 2034.

(3) This program supplements requirements in division 244, Oregon Federal Hazardous Air Pollutant Program, and division 246, Oregon State Air Toxics Program. This program includes four levels of risk assessment that allow sources to choose any level of assessment to assess risk.

(4) The term “risk” refers to both of the following:

- (a) A calculation of the probability of developing cancer from exposure to toxic air contaminant emissions from a Toxics Emissions Unit (TEU) or an entire source. This risk is expressed in terms of ‘X’ in a million, and means that there may be X additional cases of cancer in a population of one million people, over and above the background rate of cancer.
- (b) A calculation of the likelihood of an adverse noncancer health effect from exposure to toxic air contaminant emissions from a TEU or an entire source. This risk is expressed in terms of a Hazard Index of ‘Y’. Below a Hazard Index of 1, adverse health effects are unlikely, and above a Hazard Index of 1, adverse health effects become more likely.

(5) This statement of purpose and overview is an aid to understanding the regulations in OAR 340-245-0010 through 340-245-8060 that follow, and is not for the purpose of regulation or compliance.

- (a) OAR 340-245-0010, Applicability and Jurisdiction, through OAR 340-245-0022, Abbreviations and Acronyms, describes which sources the risk-based toxic air contaminant permitting program applies to and specifies definitions to be used in the program.
- (b) OAR 340-245-0030, Affected Sources and Requirements, specifies which sources are subject to the rules in this division, and which rules they must follow when making changes to their facilities. From this rule, sources are referred to OAR 340-245-0070 New or Modified TEU Requirements, or OAR 340-245-0080 Source Risk Assessment, for the specific requirements they must meet.
- (c) OAR 340-245-0040, Implementation, is the rule that explains how DEQ will begin implementing the Cleaner Air Oregon program.
- (d) OAR 340-245-0050, Submittal Deadlines, provides the deadlines by which owners or operators must submit risk assessment compliance information when required by DEQ under this division. Owners or operators are allowed more time to submit the more complex assessments.
- (e) OAR 340-245-0060, Exempt TEUs and TEU Designation, contains the criteria for a Toxic Emission Unit to be designated exempt because it poses potentially very low risk. This rule also explains how TEUs should be designated in permit attachments to ensure compliance with all requirements.
- (f) OAR 340-245-0070, New and Modified TEU Requirements, includes the requirements for approval of new or modified TEUs, including criteria for determining whether a TEU is exempt or de minimis.
- (g) OAR 340-245-0080, Source Risk Assessment, includes requirements and procedures for the four levels of risk assessment to determine what requirements apply. The first risk assessment level is relatively simple but is also likely to overestimate risk. As the levels progress from Level 2 to 4, the assessments become more complex but also provide increasingly more site-specific and refined estimates of risk.
- (h) OAR 340-245-0200, Modeling Requirements, contains air quality modeling requirements for owners or operators of sources that are required to perform modeling to assess risk.
- (i) OAR 340-245-0210, Comprehensive Health Risk Assessment Requirements, contains the requirements that an owner or operator must use to perform the most complex risk assessment.
- (j) OAR 340-245-0220, Risk Reduction Plan Requirements, specifies how an owner or operator of an existing source must develop a plan to reduce risk if the source risk exceeds the TBACT Level or the Risk Reduction Level. Risk can be reduced using a variety of methods as long as they are enforceable as permit conditions and achieve the required level of risk reduction. Provisions for Voluntary Risk Reduction are included in this rule.
- (k) OAR 340-245-0230, TBACT Plan Requirements, specifies how an owner or operator must develop a plan to reduce risk if the source risk exceeds the applicable TBACT Level. The rule requires an owner or operator to periodically review TBACT to see if new risk reduction methods become available.

- (l) OAR 340-245-0235, Postponement of Risk Reduction, specifies how an owner or operator may request postponement of risk reduction due to financial hardship.
- (m) OAR 340-245-0240, Cleaner Air Oregon Ambient Monitoring, allows an owner or operator to perform ambient monitoring to determine actual concentrations of toxic air contaminants in the ambient air around a source. The rule allows for implementation of some requirements to be delayed while ambient monitoring is done under certain conditions.
- (n) OAR 340-245-0250, Community Engagement, contains procedures that DEQ must use when the risk from their source is greater than the applicable Community Engagement Level.
- (o) OAR 340-245-0300, Toxic Air Contaminant Permit Attachment Procedures, includes the procedural requirements for obtaining a permit attachment. The Toxic Air Contaminant Permit Attachment will be attached to the source's Air Contaminant Discharge Permit or Title V Operating Permit.
- (p) OAR 340-245-0310, Source Risk Limits, explains how risk limits will be set in Toxic Air Contaminant Permit Attachments.
- (q) OAR 340-245-0320, Calculations, explains how calculations required in the rules must be performed. This rule also explains how calculations should be rounded off to evaluate compliance with Source Risk Limits.
- (r) OAR 340-245-0330, TBACT and TLAER Determinations, explains, respectively, how a Toxics Best Available Control Technology and Toxics Lowest Achievable Emission Rate analysis must be performed.
- (s) OAR 340-245-0335, Pollution Prevention, explains how a pollution prevention analysis must be performed.
- (t) OAR 340-245-0340, Emissions Inventory and Modeling Information, authorizes DEQ to require a source to submit an inventory of all of its toxic air contaminant emissions.
- (u) OAR 340-245-0400 through 340-245-0420, Toxicity Reference Value Hierarchy, Calculation of Toxicity Reference Values and Risk-Based Concentrations, and Process for Updating Lists of Regulated Toxic Air Contaminants and Their Risk-Based Concentrations, describe how DEQ, in consultation with OHA, determined the Risk-Based Concentrations and how the RBCs may be updated.
- (v) OAR 340-245-0500, Fees, specifies the permitting fees that apply for the Toxic Air Contaminant Permit Attachments and fees for other activities that require review by DEQ or OHA.
- (w) OAR 340-245-8000 through 340-245-8060, Tables, include lists of the regulated toxic air contaminants and the values used to develop Risk-Based Concentrations.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0010

Applicability and Jurisdiction

(1) This division applies in all areas of the state and to all sources, excluding sources located on tribal and federal lands that are not subject to regulation by DEQ.

(2) DEQ may consult with OHA as necessary on the implementation of the rules in this division.

(3) Subject to the requirements in this division and OAR 340-200-0010(3), Lane Regional Air Protection Agency is designated by the EQC to implement the rules in this division within its area of jurisdiction.

(4) The Cleaner Air Oregon rules apply to entire sources as well as to individual TEUs.

(5) The owner or operator of a source subject to this division may also be subject to other air quality rules including but not limited to those listed below, either in relation to its obligations under this division or independent of this division.

(a) OAR 340 division 209 Public Participation;

(b) OAR 340 division 210 Stationary Source Notification Requirements;

(c) OAR 340 division 212 Stationary Source Testing and Monitoring;

(d) OAR 340 division 214 Stationary Source Reporting Requirements;

(e) OAR 340 division 216, Air Contaminant Discharge Permits, including fees;

(f) OAR 340 division 218 Oregon Title V Operating Permits;

(g) OAR 340 division 220 Oregon Title V Operating Permit Fees;

(h) OAR 340 division 244 Oregon Federal Hazardous Air Pollutant Program; and

(i) OAR 340 division 246 Oregon State Air Toxics Program.

(6) Disclaimer.

Compliance with this rule does not authorize the emission of any toxic air contaminant in violation of any other federal, state, or local law or regulation, or exempt the owner or operator from any other applicable law or regulation.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0020

Definitions

The definitions in OAR 340-200-0020, 340-204-0010 and this rule apply to this division. If the same term is defined in this rule and 340-200-0020 or 340-204-0010, the definition in this rule applies to this division.

- (1) “ABEL” means a computer model developed by EPA that evaluates a corporation's or partnership's ability to afford compliance costs, cleanup costs or civil penalties.
- (2) “Actual toxic air contaminant emission rate” means:
 - (a) For an existing source, the toxic air contaminant emissions rate from the source’s actual production during the past calendar year. DEQ may allow the use of a prior time period upon a determination that it is more representative of normal source operation; or
 - (b) For a new or reconstructed source, the toxic air contaminant emissions rate from the reasonably anticipated actual production by the new or reconstructed source
- (3) “Acute” means evaluated over a 24-hour period.
- (4) “AERMOD” is the EPA approved steady-state air dispersion model that is the primary model used for the analysis of ambient concentrations for regulatory compliance. AERMOD uses a fully developed set of meteorological and terrain data. AERMOD stands for American Meteorological Society/Environmental Protection Agency Regulatory Model.
- (5) “AERSCREEN” is the EPA approved screening dispersion model based on AERMOD. The model uses conservative screening meteorology to produce estimates of "worst-case" concentration estimates that are equal to or greater than the estimates produced by AERMOD. AERSCREEN stands for American Meteorological Society/Environmental Protection Agency Regulatory Screening Model.
- (6) “Area of impact” means:
 - (a) For excess cancer risk, the geographic area where risk is determined to be above the applicable Risk Action Level, and is determined by AERMOD or other comparable complex modeling approved by DEQ.
 - (b) For noncancer health risk, the geographic area where hazard index values are determined to be above the applicable acute and chronic Risk Action Levels, as appropriate, and is determined by AERMOD or other comparable complex modeling approved by DEQ.
- (7) “Chronic” means evaluated over a one-year period or more.
- (8) “Cleaner Air Oregon rules” means OAR 340-245-0005 through 340-245-8060.

- (9) “Community Engagement Level” means the risk action levels applicable to existing sources and new and reconstructed sources as identified under that name in OAR 340-245-8010 Table 1.
- (10) “Construction permit” means a Construction Air Contaminant Discharge Permit under OAR chapter 340, division 216.
- (11) “De minimis source” means a source whose excess cancer risk, chronic noncancer risk and acute noncancer risk estimates are each less than or equal to the Source Permit Level in OAR 340-245-8010 Table 1.
- (12) “De minimis TEU” means a TEU whose excess cancer risk, chronic noncancer risk and acute noncancer risk estimates are each less than or equal to the Significant TEU Level in OAR 340-245-8010 Table 1.
- (13) “DEQ notice date” means the date that DEQ sends a notice to an owner or operator that a Source Risk Assessment is required.
- (14) “Emissions Scaled Risk Estimate” means an estimate of risk based on the most recent risk assessment result multiplied by a scaling factor that reflects emissions changes since the most recent risk assessment. The calculations are specified in OAR 340-245-0320(3).
- (15) “Environmental Justice” has the meaning given by Oregon’s Environmental Justice Task Force, which defines Environmental Justice as equal protection from environmental and health hazards, and meaningful public participation in decisions that affect the environment in which people live, work, learn, practice spirituality, and play. Environmental Justice communities include minority and low-income communities, tribal communities, and other communities traditionally underrepresented in public process. Underrepresented communities may include those with significant populations of youth, the elderly, or those with physical or mental disabilities.
- (16) “Excess cancer risk” means the probability of developing cancer from exposure to the toxic air contaminant emissions, over and above the background rate of cancer.
- (17) “Exempt source” means a source at which all TEUs are exempt or no TEUs are present.
- (18) “Exempt TEU” means a TEU that is not required to comply with the requirements of this division under OAR 340-245-0060(1). An exempt TEU may be a new or reconstructed TEU or an existing TEU.
- (19) “Existing source” means a source that:
- (a) Began construction before <enter effective date of rules>; or
 - (b) Submitted all necessary applications to DEQ under OAR 340 divisions 210 or 216 before <enter effective date of rules>, and all such applications were deemed complete by DEQ.
- (20) “Existing TEU” means a TEU that is not a new or reconstructed TEU.

(21) “Exposure location” means an actual location where a person or persons may be exposed to a toxic air contaminant, and thus the location of the air quality modeling receptor at which concentrations and risk are evaluated by exposure type. Exposure locations may be subcategorized as follows:

(a) “Chronic exposure location” means a place outside the boundary of a source being modeled for annual average concentrations of a toxic air contaminant, including residential and non-residential exposure locations:

(A) “Residential exposure location” means a place outside the boundary of a source where a person or persons may reasonably be present for most hours of each day over a period of many years, including individual houses and areas that are zoned to allow residential use either exclusively or in conjunction with other uses; and

(B) “Nonresidential exposure location” means a place outside the boundary of a source where a person or persons may reasonably be present for a few hours several days per week, possibly over a period of several years, and that is zoned for uses that do not allow residential use;

(b) “Acute exposure location” means a place that is any of the following:

(A) A place outside the boundary of a source being modeled for 24-hour average concentrations of a toxic air contaminant;

(B) A chronic exposure location; or

(C) A location where a person may spend several hours of one day, such as but not limited to parks, sports facilities and agricultural fields.

(22) “Fixed capital cost” means the capital needed to provide all the depreciable components of a source.

(23) “Hazard Index number” means a number equal to the sum of the hazard quotients attributable to toxic air contaminants that have noncancer effects on the same target organs or organ systems.

(24) “Hazard quotient” means a calculated numerical value that is used to evaluate noncancer health risk from exposure to a single toxic air contaminant. The calculated numerical value is the ratio of the air concentration of a toxic air contaminant to the noncancer risk based concentration at which no serious adverse human health effects are expected to occur.

(25) “Immediate Curtailment Level” means the risk action levels applicable to existing sources as identified under that name in OAR 340-245-8010 Table 1.

(26) “INDIPAY” means a computer model developed by EPA that evaluates an individual's ability to afford compliance costs, cleanup costs or civil penalties.

(27) “Inhalation Unit Risk” means the upper-bound excess lifetime cancer risk estimated to result from continuous exposure to a toxic air contaminant at a concentration of 1 $\mu\text{g}/\text{m}^3$ in air.

The interpretation of inhalation unit risk would be as follows: if unit risk = 2×10^{-6} per $\mu\text{g}/\text{m}^3$, 2 excess cancer cases (upper bound estimate) are expected to develop per 1,000,000 people if exposed daily for 70 years to 1 μg of the toxic air contaminant per m^3 of air.

(28) “Initial risk assessment” means the first risk assessment that a new or an existing source is required to perform.

(29) “Multipathway” means consideration of exposure pathways in addition to inhalation of chemicals in air, such as incidental ingestion and dermal contact with toxic air contaminants migrating to soil and water.

(30) “MUNIPAY” means a computer model developed by EPA that evaluates a municipality's or regional utility's ability to afford compliance costs, cleanup costs or civil penalties.

(31) “New or modified TEU” means that one of the following criteria is met for a TEU:

(a) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 was not required, and construction began on or after <enter effective date of rules>;

(b) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 is or was required, and the application was submitted on or after <enter effective date of rules>; or

(c) Approval to construct or operate under OAR 340-210-0205 through 340-210-0250 was required, but was not obtained as required, and construction began on or after the following, as applicable:

(A) For Type 1 changes, 10 days before <enter effective date of rules>;

(B) For Type 2 changes, 60 days before <enter effective date of rules>;

(C) For Type 3 changes, 120 days before <enter effective date of rules>;

(D) For Type 4 changes, 240 days before <enter effective date of rules>;

(d) With respect to a modification, approval to construct or operate refers to approval to construct or operate the modification.

(32) “New source” means a source that is not an existing source.

(33) “Nonresident” means persons who regularly spend time at a location but do not reside there. This includes but is not limited to children attending schools and daycare facilities, and adults at workplaces.

(34) “Notification area” means the area of impact or the area within a distance of 1.5 kilometers of a source, whichever is greater.

(35) “Operating permit” means a General, Basic, Simple or Standard Air Contaminant Discharge Permit under OAR 340 division 216 or an Oregon Title V Operating Permit under OAR 340 division 218.

(36) “Owner or operator” means the owner or operator of a source subject to the regulation where the term is used in this division.

(37) “Percentile low-income” means the percentile of a block group's population in households where the household income is less than or equal to twice the federal poverty level.

(38) “Percentile minority” means the percentile of individuals in a block group who list their racial status as a race other than white alone and/or list their ethnicity as Hispanic or Latino. That is, all people other than non-Hispanic white-alone individuals. The word "alone" in this case indicates that the person is of a single race, not multiracial.

(39) “Permit Denial Level” means the risk action levels applicable to new and reconstructed sources as identified under that name in OAR 340-245-8010 Table 1.

(40) “Pollution Prevention” means any practice that reduces, eliminates, or prevents pollution at its source. Pollution prevention is also known as “source reduction.”

(41) “Reconstructed” means an individual project constructed at a source that, once constructed, increases the hourly capacity of any changed equipment to emit and where the fixed capital cost of new components exceeds 50 percent of the fixed capital cost that would have been required to construct a comparable new source.

(42) “Risk” means the chance of harmful effects to human health resulting from exposure to a toxic air contaminant. For the purpose of these rules, risk includes three types of risk: cancer, chronic noncancer, and acute noncancer.

(43) “Risk Action Level” is the level of risk at which the owner or operator of a TEU or source will be required to take specific action depending on the level of risk posed to the area of impact as described in these rules. Risk Action Levels are listed in OAR 340-245-8010 Table 1 for a source, as indicated by the context in which the term is used.

(44) “Risk assessment” means a procedure that identifies toxic air contaminant emissions from a source and calculates the potential risk from those emissions. This term specifically refers to the procedures under OAR 340-245-0080(5) through (8) and may include the results of Cleaner Air Oregon Ambient Monitoring as allowed under OAR 340-245-0080(1)(a)(C).

(45) “Risk assessment level” means the relative complexity of the Source Risk Assessment procedures in OAR 340-245-0080(5) through (8); the procedures are designated Level 1 through Level 4, respectively. The complexity of a risk assessment increases as the level numeration increases, i.e., a Level 1 risk assessment is the simplest and a Level 4 risk assessment is the most complex.

(46) “Risk Assessment Notification” is a form that DEQ must develop and make available to owners and operators. The form must be used by an owner or operator to request approval of:

(a) A de minimis source determination under a Level 1 through 4 risk assessment in OAR 340-245-0080;

(b) An exempt source determination under OAR 340-245-0080(4); and

(c) An exempt TEU approval under OAR 340-245-0070(2)(a) or (3)(a).

(47) “Risk limit” means a condition or requirement in a permit or permit attachment that serves to limit the risk from a source or part of a source. Such conditions or requirements may include, but are not restricted to, limits on risk from the source or part of a source, limits on emissions of one or more toxic air contaminants, limits on emissions from one or more TEUs, or limits on source operation. A Source Risk Limit established under OAR 340-245-0310 is a risk limit.

(48) “Risk-Based Concentration” or “RBC” means the concentration of a toxic air contaminant listed in OAR 340-245-8050 Table 5 that, for the designated exposure scenario, results in an excess cancer risk of one in one million, or a noncancer hazard quotient of one for either chronic exposure or acute 24-hour exposure.

(49) “Risk Reduction Level” means the risk action levels applicable to existing sources as identified under that name in OAR 340-245-8010 Table 1.

(50) “Sensitive Population” means people with biological traits that may magnify the effect of toxic air contaminant exposures that include individuals undergoing rapid rates of physiological change, such as children, pregnant women and their fetuses, and individuals with impaired physiological conditions, such as elderly persons or persons with existing diseases such as heart disease or asthma. Other sensitive individuals include those with lower levels of protective biological mechanisms due to genetic factors, and those with increased exposure rates. For instance, children breathe at higher rates than adults and have greater hand-to-mouth activity.

(51) “Significant TEU” means a TEU that poses risk equal to or greater than the Significant TEU Level.

(52) “Significant TEU Level” means the risk action level applicable to TEUs as identified under that name in OAR 340-245-8010 Table 1.

(53) “Source Permit Level” means the risk action levels applicable to sources as identified under that name in OAR 340-245-8010 Table 1.

(54) “Source risk” means the cumulative risk from all toxic air contaminants emitted by all significant TEUs at a source.

(55) “Source Risk Assessment” means a toxic air contaminant risk assessment under OAR 340-245-0080(5) through (8) that includes all TEUs at the source.

(56) “TBACT Level” means the risk action levels applicable to existing sources as identified under that name in OAR 340-245-8010 Table 1.

(57) “TLAER Level” means the risk action levels applicable to new and reconstructed sources as identified under that name in OAR 340-245-8010 Table 1.

(58) “Toxic air contaminant” means the air pollutants that have been determined by the EQC to cause, or reasonably be anticipated to cause, adverse effects to human health and are listed in OAR 340-245-8020 Table 2.

(59) “Toxic Air Contaminant Permit Attachment” means written authorization issued under this division that contains requirements based on the Cleaner Air Oregon rules for sources that emit toxic air contaminants and is attached to an Air Contaminant Discharge Permit or a Title V Operating Permit.

(60) “Toxicity Reference Value” or “TRV” means the following:

(a) For carcinogens, the air concentration corresponding to a one in one million excess cancer risk, calculated by dividing 1 in 1 million (0.000001) by the Inhalation Unit Risk (IUR) specific to that toxic air contaminant as established by the authoritative body from which it was adopted.

(b) For noncarcinogens, the air concentration above which relevant effects might occur to humans following environmental exposure and below which it is reasonably expected that effects will not occur.

(61) “Toxics Best Available Control Technology” or “TBACT” means a toxic air contaminant emission limitation or emission control measure or measures based on the maximum degree of reduction of toxic air contaminants that is feasible, determined for each source on a case-by-case basis, identified in, or determined using the procedures in, OAR 340-245-0330.

(62) “Toxics emissions unit” or “TEU” means an emissions unit or one or more individual emissions producing activities that emit or have the potential to emit any toxic air contaminant, as designated under OAR 340-245-0060(2).

(63) “Toxics Lowest Achievable Emission Rate” or “TLAER” means that rate of emissions which reflects the most stringent emission limitation which is achieved in practice by a source in the same class or category of sources as the source required to perform the TLAER analysis, determined using the procedures in OAR 340-245-0330.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0022

Abbreviations and Acronyms

- (1) “ELAF” means early-life adjustment factor.
- (2) “HI” means hazard index.
- (3) “IUR” means inhalation unit risk.
- (4) “MPAF” means multipathway adjustment factor.
- (5) “NRAF” means nonresidential adjustment factor.
- (6) “OHA” means Oregon Health Authority.

- (7) “PTE” means potential to emit.
- (8) “RBC” means Risk-Based Concentration.
- (9) “RfC” means reference concentration.
- (10) “TBACT” means Toxics Best Available Control Technology.
- (11) “TEU” means toxics emissions unit.
- (12) “TLAER” means Toxics Lowest Achievable Emission Rate.
- (13) “TRV” means toxicity reference value.
- (14) “µg/m³” means micrograms per cubic meter.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0030

Affected Sources and Requirements

(1) When a risk assessment is required under this rule, the risk assessment must consider only the toxic air contaminants listed in OAR 340-245-8050 Table 5.

(2) Existing source. When notified in writing by DEQ under OAR 340-245-0040, the owner or operator of an existing source that has any of the following permit types must perform a risk assessment under OAR 340-245-0080:

(a) Simple, Standard or Construction Air Contaminant Discharge Permit;

(b) Title V permit;

(c) General Air Contaminant Discharge Permit in category 21, Chrome plating and anodizing subject to a NESHAP under OAR chapter 340 division 244; or

(d) General Air Contaminant Discharge Permit in category 65, Plating and polishing operations subject to an area source NESHAP under OAR chapter 340 division 244.

(3) New source. The owner or operator of a proposed new source that is required to obtain a Simple, Standard or Construction Air Contaminant Discharge Permit must perform a risk assessment under OAR 340-245-0080 and demonstrate compliance with this division for the entire source before beginning construction of the proposed new source.

(4) Other sources. When notified in writing by DEQ, the owner or operator of a source that is not subject to sections (2) or (3) must perform a risk assessment under OAR 340-245-0080. DEQ may only notify such a source after determining through an investigation or file review that the source may emit toxic air contaminants in quantities that may cause the source’s risk to exceed the Source Permit Level.

(5) New or modified TEU.

(a) The owner or operator of an existing source that has previously submitted a Toxic Air Contaminant Permit Attachment application or Risk Assessment Notification required under OAR 340-245-0080, and that proposes to construct a new or modified TEU, must comply with OAR 340-245-0070 before beginning construction of the new or modified TEU.

(b) The owner or operator of an existing source that has not previously submitted a Toxic Air Contaminant Permit Attachment application or Risk Assessment Notification required under OAR 340-245-0080, and that proposes to construct a new or modified TEU, is not required to obtain approval of a new or modified TEU before beginning construction under the Cleaner Air Oregon rules, but must comply with the requirements of OAR chapter 340, division 210 or division 216, whichever is applicable.

(6) TEUs that DEQ may not approve. Except for de minimis and exempt TEUs, DEQ must not approve a new or modified TEU if:

(a) The owner or operator of the TEU does not meet the with OAR 340-245-0070;

(b) The TEU would increase risk from the source to greater than a Permit Denial Level or the Risk Reduction Level; or

(c) The owner or operator of the source does not comply with OAR 340-245-0080, if required.

(7) Sources that DEQ may not approve. Except for de minimis and exempt sources, DEQ may not approve a source if:

(a) The owner or operator of a proposed new or reconstructed source does not comply with OAR 340-245-0080;

(b) DEQ determines that the emissions from a proposed new or reconstructed source would result in risk at any exposure location that will exceed any Permit Denial Level; or

(c) DEQ determines that the emissions from an existing source would result in risk at any exposure location that will exceed the Immediate Curtailment Risk Action Level.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0040

Implementation

(1) DEQ will not have sufficient resources to implement Cleaner Air Oregon for all existing sources at the same time. For existing sources, DEQ may implement this division on a source-by-source basis, starting with sources DEQ determines present greater potential health risks, as determined under this rule. DEQ may work with as many existing sources as possible based on its available resources. DEQ may initiate the process of working with owners or operators of an

existing source subject to this division by sending a notice letter to the owner or operator. When an owner or operator receives a DEQ notice letter, that will begin the application of the compliance deadlines described in this rule for that source.

(2) DEQ must process applications for new or reconstructed sources, and for new and modified TEUs when required by OAR 340-245-0030(2), on an as received basis without regard to section (1).

(3) Source Estimated Risk Ranking Process. DEQ must develop the ranked list of permitted existing sources as follows:

(a) DEQ must use the best emission inventory information available to DEQ at the time the list is created and will exclude natural gas, propane, liquefied petroleum gas, landfill gas and digester gas combustion emissions as specified in OAR 340-245-0080(3)(b). If the emissions inventory is based on any emission reductions at the source, the reductions must be real, permanent, quantifiable and enforceable through a permit condition or rule;

(b) For each source, DEQ must calculate a score which will determine the rank of the source. DEQ must take into consideration the percentile ranking of risk, as calculated using the Level 1 Risk Assessment Tool described in OAR 340-245-0320(1), and demographic statistics that include the percentile ranking of the percent of low income residents, the percent of minority residents, the percent of residents under 5 years old, and the total number of residents within a one kilometer radius of the source. Prior to being used in the ranking formula, all of the demographic statistics for each source will be converted to a percentile relative to the demographics statistics for all other facilities being considered in the ranking.

(c) The score will be calculated using the following equations:

Equation 1:

$$Score = Risk^{0.75} \times \left(\frac{low\ income + minority + residents < 5 + population}{4} \right)^{0.25}$$

Where:

Risk means the percentile ranking of the risk score calculated in Equation 2

Low income means the percentile ranking of the percent of low income residents

Minority means the percentile ranking of the percent of minority residents

Residents < 5 means the percentile ranking of the percent of residents under 5 years old

Population means the percentile ranking of the total number of residents

Equation 2:

$$Risk = \frac{\sum \frac{DF_a * emissions_{x,a}}{RBC_{x,cancer}}}{25} + \sum \frac{DF_a * emissions_{x,a}}{RBC_{x,chronic\ noncancer}}$$

Where:

\sum means to sum over all toxic air contaminants x

DF means dispersion factor

RBC means the Risk-Based Concentration

$Emissions$ means the actual emissions of toxic air contaminants from a source reported to DEQ

Subscripts

a means annual

x refers to each toxic air contaminant emitted.

(4) Dividing Source Estimated Risk Rankings Into Groups. DEQ must use the rankings developed under section (3) to divide existing sources into one of three groups based on their estimated risk ranking. DEQ must place sources with the highest estimated risk rankings into Group 1, sources with the next highest estimated risk rankings into Group 2, and sources with the lowest estimated risk rankings into Group 3. In addition to the ranking information developed under section (3), DEQ may also adjust the group a source is placed in based on DEQ's assessment of the following additional factors:

- (i) The relative severity of the potential noncancer health effect of a toxic air contaminant emitted by a source;
- (ii) The degree to which a source has existing control devices that reduce its toxic air contaminant emissions;
- (iii) The distance from a source to its closest exposure location;
- (iv) The likelihood that risk from a source may be greater or lower than estimated from the Level 1 Risk Assessment Tool described in OAR 340-245-0320(1) due to factors not considered in a Level 1 Risk Assessment;
- (v) The efficient allocation of DEQ resources; and
- (vi) DEQ's knowledge of changes in a source's toxic air contaminant emissions not captured in the ranking equation.

(3) DEQ must report to the EQC annually, at approximately 12 month intervals, for the first five years after <effective date of the rules> with an evaluation of the progress and results of

implementing the Cleaner Air Oregon rules. The evaluation should include, but is not limited to the following:

- (a) The number of risk assessments performed and the results of those assessments, including:
 - (A) The number of sources whose risk is below TLAER or TBACT Risk Action Levels; and
 - (B) The number of sources whose risk is above TLAER, TBACT or Risk Reduction Risk Action Levels, the actions taken, such as requesting a Risk Reduction Plan , and the risk reductions achieved;
- (b) A spatial map of modeled risk levels for the Toxic Air Contaminant Permit Attachments approved;
- (c) The number of sources that submitted risk assessments prior to being notified by DEQ that they must perform a risk assessment;
- (d) To the extent possible, the number of sources that reduced risk prior to being notified by DEQ to perform a risk assessment; and
- (e) Annual summary statistics on toxic air contaminant emissions inventory changes to better understand long-term reductions in toxic air contaminant emissions.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0050

Submittal and Payment Deadlines

(1) When required to demonstrate compliance with Cleaner Air Oregon under OAR 340-245-0030 and 340-245-0040, the owner or operator of a source must submit all information required by, and by the deadlines specified in, subsections (a) through (i) to DEQ, as applicable, except as allowed under section (2). The owner or operator must also pay all applicable specific activity fees under OAR 340-216-8030 Table 3 by the deadlines specified in subsections (a) through (i), as applicable.

(a) An updated emissions inventory required under OAR 340-245-0340 that will be used in the risk assessment must be submitted to DEQ no later than 30 days after the DEQ notice date. If the owner or operator is submitting source test data to supplement the emissions inventory, the updated emissions inventory must be submitted to DEQ no later than 120 days after the DEQ notice date. If the owner or operator is submitting source test data to supplement the emissions inventory, the owner or operator must also submit an updated modeling protocol and Level 3 or Level 4 Source Risk Assessment work plan prior to or concurrently with that submission.

(b) The modeling protocol required under OAR 340-245-0200 must be submitted to DEQ no later than 30 days after receiving DEQ preliminary approval of the updated emissions inventory under subsection (a).

(c) The Level 3 or Level 4 Source Risk Assessment work plan required under OAR 340-245-0210 must be submitted to DEQ no later than 60 days after receiving DEQ preliminary approval of the modeling protocol under subsection (b).

(d) A Level 1 Risk Assessment under OAR 340-245-0080(5) must be submitted to DEQ no later than 60 days after DEQ preliminary approval of the updated emissions inventory required under subsection (a).

(e) A Level 2 Source Risk Assessment under OAR 340-245-0080(6) must be submitted to DEQ no later than 60 days after DEQ preliminary approval of both the updated emissions inventory required under subsection (a) and the modeling protocol required under subsection (b).

(f) A Level 3 Source Risk Assessment under OAR 340-245-0080(7) must be submitted to DEQ no later than 120 days after DEQ preliminary approval of the Level 3 Source Risk Assessment work plan required under subsection (c).

(g) A Level 4 Source Risk Assessment under OAR 340-245-0080(8) must be submitted to DEQ no later than 150 days after DEQ preliminary approval of the Level 4 Source Risk Assessment work plan required under subsection (c).

(h) A Cleaner Air Oregon Ambient Monitoring plan required under OAR 340-245-0240 must be submitted to DEQ no later than 30 days after DEQ preliminary approval of the Level 3 Source Risk Assessment or the Level 4 Source Risk Assessment under subsection (f) or (g), or earlier, if approved by DEQ.

(i) A Risk Reduction Plan under OAR 340-245-0220, that may include a TBACT plan under OAR 340-245-0235, must be submitted to DEQ no later than 120 days after DEQ preliminary approval of the Level 3 Source Risk Assessment or the Level 4 Source Risk Assessment under subsection (f) or (g).

(2) DEQ must preliminarily review the submittals required under section (1) to determine the adequacy and completeness of the information submitted. DEQ must either approve the submittals in writing, or notify the owner or operator in writing of any corrections, additional information or updates that are required in order for the submittal to receive DEQ approval.

(a) If DEQ determines that additional required information is needed or that corrections or updates are needed, then DEQ must notify the owner or operator in writing to request the needed information or corrections, and must set a deadline for submittal of the needed information. DEQ may determine the appropriate deadline, but the deadline may not provide more time than was provided to the owner or operator to make its original submission.

(b) An owner or operator may request additional time to submit the additional information or corrections or updates but must do so in writing to DEQ within seven days of receiving the written request from DEQ. DEQ may grant or deny the request based on the following criteria:

- (A) The owner or operator has demonstrated progress in completing the submittal; and
 - (B) A delay is related to reasonably unforeseen changes in relevant data, analysis, operations or other key parameters necessary to complete the submittal.
- (c) If the owner or operator's submittal is unapprovable, or if the additional information or corrections requested by DEQ are not provided in writing by the deadline provided, then DEQ may:
- (A) Modify the information, approve it as modified, and the owner or operator must pay the document modification fee in OAR 340-216-8030 Table 3; or
 - (B) Inform the owner or operator of the deficiency, provide a revised deadline to submit the needed information.
- (3) If the owner or operator submits the required information specified in section (1) after DEQ's second deadline extension without prior approval of an additional extension, or the submittal does not address corrections requested by DEQ after two requests, DEQ may modify the information, approve it as modified, and the owner or operator must pay the document modification fee in OAR 340-216-8030 Table 3, or cease working on the application, reject the application, call the source in again, and invoice the owner or operator for an additional call-in fee in OAR 340-216-8030 Table 3.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0060

Exempt TEUs and TEU Designation

(1) Exempt TEUs.

A TEU is an exempt TEU if:

- (a) The TEU is listed in the definition of categorically insignificant activity in OAR 340-200-0020, excluding subsection (a) of that definition; or
- (b) The owner or operator of the TEU has demonstrated to DEQ's satisfaction in a Toxic Air Contaminant Permit Attachment application that the TEU is not likely to emit toxic air contaminants. The demonstration may include any information the owner or operator considers relevant, including but not limited to:

- (A) The chemical make-up of the materials handled or processed in the TEU; the type of handling or processing in the TEU, including whether or not the handling or processing is likely to alter the chemical make-up of the materials; and the chemical make-up or likely chemical make-up of the materials emitted by the TEU; and

(B) Any toxic air contaminant present in materials emitted are only trace contaminants that are not intentionally present in the materials handled, processed or produced in the TEU, and are present in such small amounts that they would typically not be listed in a Safety Data Sheet, product data sheet or equivalent document.

(2) An owner or operator must designate TEUs in a way that is approvable by DEQ and compatible with the following:

(a) Multiple similar pieces of equipment need not be grouped into a single TEU, but may instead be designated as individual TEUs;

(b) An individual emissions producing activity that exhausts through multiple stacks or openings must be designated as an individual TEU;

(c) TEUs may not be designated in such a way as to avoid the requirements of this division, as determined by DEQ;

(d) Where multiple emissions-producing activities exhaust through a common opening, exhaust stack or emissions control device, each emissions producing activity may be considered a single TEU; and

(e) TEUs are not required to be the same as the emissions units listed in a source's operating or construction permit, but it is preferable that they be the same.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0070

New or Modified TEU Requirements

(1) When required under OAR 340-245-0030(2)(a), the owner or operator of a proposed new or modified TEU must obtain approval from DEQ before beginning construction of the new or modified TEU.

(a) The owner or operator must request approval by following one of the procedures in sections (2) through (4), and must pay to DEQ all applicable specific activity fees under OAR 340-216-8030 Table 3 prior to DEQ consideration of any approval request under those sections.

(b) The owner or operator may also be required to request approval of the new or modified TEU under both this rule and OAR 340-210-0205 through 340-210-0250. If approval is required under both this rule and OAR 340-210-0205 through 340-210-0250, then construction of the new or modified TEU may not begin until approved by DEQ under both this rule and AOR chapter 340, division 210.

(2) Exempt TEU.

(a) The owner or operator may request approval of a new or modified exempt TEU by demonstrating that the new or modified TEU will be an exempt TEU under OAR 340-245-0060(1), and submitting that information in a Risk Assessment Notification to DEQ.

(b) The owner or operator may proceed with the construction or modification 10 days after DEQ receives the notification required in paragraph (a) or on the date that DEQ approves the proposed construction in writing, whichever is sooner, unless DEQ notifies the owner or operator in writing that the proposed construction or modification is not approved or is not approvable as an exempt TEU.

(c) If the owner or operator of the source has been issued a Toxic Air Contaminant Permit Attachment and will be constructing a new or modified exempt TEU under this section, an application to revise its Toxic Air Contaminant Permit Attachment is not required. The new or modified exempt TEU will be incorporated into the Toxic Air Contaminant Permit Attachment the next time the Toxic Air Contaminant Permit Attachment is modified, either when requested by the owner or operator or required by DEQ.

(3) De minimis TEU.

(a) The owner or operator may request approval of a new or modified de minimis TEU by:

(A) Demonstrating that the risk from the new or modified TEU for all toxic air contaminants emitted that are listed in OAR 340-245-8050 Table 5 will be no more than the Significant TEU Level. The owner or operator must make this demonstration by applying and complying with one of the Source Risk Assessment procedures in OAR 340-245-0080(5) through (8), for the TEU; and

(B) Submitting a Risk Assessment Notification to DEQ, including all information necessary to verify that the risk from the new or modified TEU for all toxic air contaminants listed in OAR 340-245-8050 Table 5 is no more than the Significant TEU Level.

(b) The owner or operator may proceed with the construction or modification 10 days after DEQ receives the notification required in paragraph (a)(B) or on the date that DEQ approves the proposed construction in writing, whichever is sooner, unless DEQ notifies the owner or operator in writing that the proposed construction or modification is not approved or is not approvable as a de minimis TEU.

(c) The new or modified TEU must be de minimis when the new or modified TEU begins operating.

(d) If the owner or operator of the source has been issued a Toxic Air Contaminant Permit Attachment and will be constructing a new or modified de minimis TEU under this section, an application to revise its Toxic Air Contaminant Permit Attachment is not required. The new or

modified de minimis TEU will be incorporated into the Toxic Air Contaminant Permit Attachment the next time the Toxic Air Contaminant Permit Attachment is modified, either when requested by the owner or operator or required by DEQ.

(4) Significant TEU.

(a) The owner or operator of a proposed new or modified significant TEU must submit a revised risk assessment describing the new or modified significant TEU, including all of the following information, except as allowed under subsection (e):

(A) Information necessary to verify the risk from the new or modified TEU for all toxic air contaminants listed in OAR 340-245-8050 Table 5 using any Source Risk Assessment procedure, Level 1 through Level 4, under OAR 340-245-0080(5) through (8). The owner or operator may simply add the risk from the new or modified TEU to its prior results from its latest Source Risk Assessment rather than redoing the risk assessment for the whole source. If risk for the significant TEU is determined by any Source Risk Assessment procedure under OAR 340-245-0080(6) through (8), the owner or operator must receive DEQ approval of the modeling protocol under OAR 340-245-0200 or the risk assessment work plan under OAR 340-245-0210 before performing the risk assessment, whichever is applicable.

(B) Information necessary to verify that the new or modified TEU has either TLAER, if the source risk is greater than the TLAER Level for a new or reconstructed source, or TBACT, if the source risk is greater than the TBACT Level for an existing source. If a TLAER or TBACT determination under OAR 340-245-0330 is required, the TLAER or TBACT determination must be approved by DEQ.

(b)(A) Owners or operators of sources that have applied for, but have not yet been issued a Toxic Air Contaminant Permit Attachment for that source, must submit an updated Toxic Air Contaminant Permit Attachment application if the new or modified significant TEU requires any additional permit attachment conditions or if the risk from the new or modified significant TEU increases the source risk to greater than the risk calculation that was included in the Toxic Air Contaminant Permit Attachment application.

(B) Owners or operators of sources that have been issued a Toxic Air Contaminant Permit Attachment must submit an application for a modified Toxic Air Contaminant Permit Attachment if the new or modified significant TEU requires any additional permit attachment conditions or if the risk from the new or modified significant TEU increases the source risk to greater than the source's currently permitted level.

(C) If the new or modified significant TEU does not require any additional permit attachment conditions or does not increase the risk to greater than the source's currently permitted level, an application to revise the Toxic Air Contaminant Permit Attachment is not required. DEQ must revise the source's Toxic Air Contaminant Permit Attachment the next time the Toxic Air

Contaminant Permit Attachment is modified, either when requested by the owner or operator or required by DEQ.

(c) The owner or operator may not begin construction of the proposed significant TEU prior to its receipt from DEQ of a new or modified Toxic Air Contaminant Permit Attachment that approves the significant TEU.

(d) Owners or operators of sources that were previously determined to be an exempt source under OAR 340-245-0080(4) or that performed a Source Risk Assessment under OAR 340-245-0080 and determined that the source was a de minimis source, but the source will no longer be an exempt or de minimis source after the new or modified significant TEU is constructed, must follow the procedures in subsections (a) through (c) above. Such an owner or operator may not operate the significant TEU prior to its receipt from DEQ of a new or modified Toxic Air Contaminant Permit Attachment that approves the significant TEU.

(e) Owners or operators of sources that were previously determined to be an exempt source under OAR 340-245-0080(4) or performed a Source Risk Assessment under OAR 340-245-0080 and were determined to be a de minimis source because the source's risk is below the Source Permit Level, and the source remains an exempt or de minimis source after the new or modified significant TEU is constructed, may submit a Notice of Intent to Construct under OAR chapter 340, division 210 and begin construction upon receipt of approval from DEQ, or 10 days after submittal of the Notice of Intent to Construct, whichever comes first.

(f) In the event that the owner or operator makes simultaneous changes to TEUs or processes other than the new or modified significant TEU for the purpose of reducing source risk, all such changes must be identified and described, and must be completed on or before the date that the new or modified significant TEU begins operating.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0080

Source Risk Assessment

(1) When required under OAR 340-245-0030 or OAR 340-245-0070(3) or (4), the owner or operator of a source must demonstrate compliance with this rule as specified below.

(a) For an existing source, the owner or operator must first attempt to demonstrate that the source is exempt or that risk from the source is less than or equal to the TBACT Level following the procedure under paragraph (A). If the owner or operator is not able to do so, then the owner or operator must comply either with paragraph (B) or (C)..

(A) Risk assessment. The owner or operator must either demonstrate that the source is an exempt source by following the procedure in section (4), or if the source is not an exempt source, demonstrate that the risk is less than or equal to TBACT Level. The owner or operator of a source that is not an exempt source must:

- (i) Assess risk using any of the Level 1 through 4 Source Risk Assessment procedures in sections (5) through (8);
- (ii) Follow the applicable calculation procedures under OAR 340-245-0320; and
- (iii) Request a Toxic Air Contaminant Permit Attachment with Source Risk Limits that ensure that the risk will be less than or equal to the TBACT Level.

(B) Risk Reduction Plan. The owner or operator may demonstrate compliance under subparagraph (i), (ii), or (iii), whichever is applicable:

- (i) If the owner or operator chooses to make physical, operational or process changes to reduce the risk to less than or equal to the TBACT Level, then the owner or operator must request a Toxic Air Contaminant Permit Attachment with a Risk Reduction Plan under OAR 340-245-0220 that ensures that the risk will be less than or equal to the TBACT Level;
- (ii) If the risk is greater than the TBACT Level and all significant TEUs meet TBACT under OAR 340-245-0330, the owner or operator must request a Toxic Air Contaminant Permit Attachment with Source Risk Limits that ensures the risk will be less than or equal to the Risk Reduction Level;
- (iii) If the risk is greater than the TBACT Level and not all significant TEUs meet TBACT under OAR 340-245-0330, the owner or operator must request a Toxic Air Contaminant Permit Attachment with a TBACT Plan under OAR 340-245-0230 to install TBACT on all significant TEUs and with Source Risk Limits that ensure that the risk will be less than or equal to the Risk Reduction Level; or
- (iv) If the risk is greater than the Risk Reduction Level, the owner or operator must request a Toxic Air Contaminant Permit Attachment with additional risk reduction measures and Source Risk Limits that ensure that the risk will be less than or equal to the Risk Reduction Level.

(C) Cleaner Air Oregon Ambient Monitoring.

(i) The owner or operator of a source may use ambient monitoring information to calculate the risk using the following procedure:

(I) The owner or operator must complete a risk assessment as required under paragraph (A) using the Level 3 or 4 Source Risk Assessment procedures in sections (7) or (8) and submit the risk assessment to DEQ before beginning Cleaner Air Oregon Ambient Monitoring.

(II) The owner or operator must comply with the applicable requirements of OAR 340-245-0240 before beginning Cleaner Air Oregon Ambient Monitoring;

(III) If risk, based on the risk assessment required under subparagraph (i), exceeds a cancer risk of 200 in 1 million or a hazard index of 20, then the owner or operator must implement an approved Risk Reduction Plan under OAR 340-245-0220 before beginning Cleaner Air Oregon Ambient Monitoring.

(IV) An owner or operator may perform Cleaner Air Oregon Ambient Monitoring at any time, subject to the requirements of OAR 340-245-0240.

(V) An owner or operator that elects to perform Cleaner Air Oregon Ambient Monitoring before being notified under OAR 340-245-0030(3) that they must comply with this rule, must, at a minimum, complete the risk assessment as required under subparagraph (i) before beginning Cleaner Air Oregon Ambient Monitoring.

(VI) DEQ may not delay issuance of a Toxic Air Contaminant Permit Attachment under paragraphs (A) or (B) because the owner or operator has not completed Cleaner Air Oregon Ambient Monitoring and the associated data analysis.

(ii) DEQ may require an owner or operator to perform ambient monitoring if DEQ determines that the modeling will not likely accurately reflect a source's toxic air contaminant concentrations. The owner or operator who is required to perform ambient monitoring must comply with the requirements in subparagraph (i). DEQ may require an owner or operator to perform ambient monitoring, including but not limited to the following situations:

(I) The owner or operator cannot accurately quantify the toxic air contaminant emissions and source testing is not feasible;

(II) The source emits toxic air contaminant fugitive emissions whose emission points are difficult to characterize; or

(III) Air dispersion modeling may not well characterize concentrations because of the configuration of the fugitive emission sources.

(b) For a new or reconstructed source, the owner or operator must first attempt to demonstrate that the source is exempt or the risk from the source is less than or equal to the TLAER Level following the procedure under paragraph (A). If the owner or operator is not able to do so, then the owner or operator must comply with paragraph (B).

(A) Risk assessment. The owner or operator must demonstrate that the source is an exempt source by following the procedure in section (4), or demonstrate that the risk is less than or equal to the TLAER Level. The owner or operator must:

(i) Assess risk using any of the Level 1 through 4 Source Risk Assessment procedures in sections (5) through (8);

(ii) Follow the applicable calculation procedures under OAR 340-245-0320; and

(iii) Unless the source demonstrates that it is an exempt source, request a Toxic Air Contaminant Permit Attachment with Source Risk Limits that ensure that the risk will be less than or equal to the TLAER Level.

(B) Risk Limit. If the risk is greater than the TLAER Level and all significant TEUs meet TLAER under OAR 340-245-0330, the owner or operator must request a Toxic Air Contaminant Permit Attachment with Source Risk Limits that ensure that the risk will be less than or equal to the Permit Denial Level.

(c) Source risk assessment procedure.

(A) The owner or operator must determine which of the available assessment options under subsection (a) or (b) is appropriate for its source and submit a Risk Assessment Notification or Toxic Air Contaminant Permit Attachment application as specified below for the selected compliance option.

(B) If the risk calculated under paragraph (a)(A) or (b)(A) is greater than the applicable Risk Action Level, then the owner or operator must follow the procedure in either subparagraph (i), (ii), or (iii) using any of the Level 1 through 4 Source Risk Assessment procedures, as applicable:

(i)(I) To be approved by DEQ as a de minimis source, the owner or operator must assess toxic air contaminant emissions at the capacity to emit of each TEU, including de minimis TEUs and submit a Risk Assessment Notification to DEQ that demonstrates that the source does not exceed the Source Permit Level.

(II) Upon receipt of a submittal from an owner or operator under subparagraph (II), DEQ must follow the procedure described in OAR 340-245-0080(4)(b).

(ii)(I) To demonstrate that risk does not exceed the applicable Risk Action Level based on the actual toxic air contaminant emission rate of the source, the owner or operator must complete its Level 1 through 4 Source Risk Assessment using the actual toxic air contaminant emission rate of the source and submit a new or modified Toxic Air Contaminant Permit Attachment application, as applicable, to DEQ that demonstrates that risk at the actual toxic air contaminant emission rate does not exceed the applicable Risk Action Level.

(II) Upon receipt of a submittal from an owner or operator under subparagraph (I), DEQ must determine whether to issue or deny a final Toxic Air Contaminant Permit Attachment based on DEQ's assessment of whether the application demonstrates that risk at the actual toxic air contaminant emission rate exceeds the applicable Risk Action Level. DEQ must follow the applicable public notice procedure in sections (5) through (8) before making its final decision to issue or deny the Toxic Air Contaminant Permit Attachment.

(iii)(I) To request a PTE or risk limit to demonstrate that risk does not exceed the applicable Risk Action Level, the owner or operator must complete its Level 1 through 4 Source Risk Assessment taking the requested limit into account and submit a new or modified Toxic Air

Contaminant Permit Attachment application, as applicable, that demonstrates that one or more permit conditions will limit risk to no more than the applicable Risk Action Level, and request that such permit condition(s) be approved.

(II) Upon receipt of a submittal from an owner or operator under subparagraph (I), DEQ must determine whether to issue or deny a final Toxic Air Contaminant Permit Attachment based on DEQ's assessment of whether the application demonstrates that one or more permit conditions will limit risk to no more than the applicable Risk Action Level. DEQ must follow the applicable public notice procedure in sections (5) through (8) before making its final decision to issue or deny the Toxic Air Contaminant Permit Attachment.

(d) DEQ may require the owner or operator of a source to conduct and submit an additional multipathway evaluation for any level of source risk assessment if DEQ determines that airborne deposition of chemicals could be important for scenarios not included in the default multipathway adjustment factor assumptions used in the original source risk assessment for the source, such as deposition to agricultural land, livestock grazing areas, drinking water reservoirs, or water bodies used for fishing.

(2) A Source Risk Assessment must include all TEUs at the source, and for which an application was submitted under OAR chapter 340 division 210 or the Cleaner Air Oregon rules, as of the date that the owner or operator submits the application required under this rule, except as allowed under section (3).

(3)(a) Exempt and de minimis TEUs. Except when required by subsection (1)(c), exempt and de minimis TEUs may be omitted from the risk assessment.

(b) Special treatment of certain gas combustion-related emissions. Risk that results from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, landfill gas and digester gas must be reported in the risk assessment, but the risk from such toxic air contaminants may be treated as follows:

(A) At each exposure location, risk may be reported as two values:

(i) The risk from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, landfill gas and digester gas; and

(ii) The risk from all other toxic air contaminant emissions.

(B) At each exposure location, the risk from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, landfill gas and digester gas may be excluded from the total risk for the purpose of determining compliance with a Risk Action Level in OAR 340-245-8010 Table 1.

(C) The risk from toxic air contaminants emitted solely from the combustion of natural gas, propane, liquefied petroleum gas, landfill gas and digester gas may be omitted from a Risk Reduction Plan under OAR 340-245-0220.

(D) Notwithstanding paragraphs (A) through (C), an owner or operator must include in its source risk assessment any toxic air contaminants that are emitted from materials that are contacted by the flame or combustion gases from the combustion of natural gas, propane, liquefied petroleum gas, landfill gas or digester gas. Materials that may emit toxic air contaminants include but are not limited to VOCs combusted in thermal oxidizers and materials dried in direct-contact dryers.

(4) Exempt Source Determination.

(a) The owner or operator must follow the procedures below to be approved by DEQ as an exempt source:

(A) Submit documentation to DEQ to demonstrate that all TEUs at the source are exempt TEUs and meet the criteria under OAR 340-245-0060(1), and submit that information in a Risk Assessment Notification to DEQ.

(b) Upon receipt of a submittal from an owner or operator under subsection (a), DEQ must:

(A) Review the submissions and, if approved, either:

(i) Write a memo to the DEQ's file for the source summarizing the assessment that will be incorporated into the review report of a permitted source upon permit renewal; or

(ii) If the owner or operator is required to maintain control devices to remain a de minimis source, then DEQ may use an existing Title V or Air Contaminant Discharge permit or issue a Toxic Air Contaminant Permit Attachment issued under OAR 340-245-0300 to require monitoring of such control devices;

(B) Follow the Category I public notice procedure in OAR chapter 340, division 209, prior to approving or denying the request to be considered an exempt source; and

(C) Keep records of exempt and de minimis sources in a database for the emissions inventory and future communication if RBCs change and emissions must be reevaluated.

(5) Level 1 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by using the Level 1 Risk Assessment Tool in OAR 340-245-8060 Table 6 to determine toxic air contaminant concentrations at the nearest chronic and acute exposure locations approved by DEQ.

(a) Restrictions on use of the Level 1 Risk Assessment Tool. DEQ may not approval a Level 1 source risk assessment if:

(A) The source is located near elevated terrain that DEQ determines could invalidate the assumptions used to develop the Level 1 risk assessment tool. Such terrain would include land higher than the stack of the source that is located within a distance from the stack equal to ten times the height of that stack.

(B) The source has multiple stacks and does not assess its stacks individually, or does not combine the stack emissions into a single modeled stack.

(C) The source has fugitive emissions. The Level 1 procedure is not appropriate for fugitive emissions, such as might be characterized as a volume or area source. The owner or operator of a source with fugitive emissions must use Level 2 or Level 3 for their risk analysis.

(b) Directions for using the Level 1 Risk Assessment Tool are described in OAR 340-245-0320(1).

(c) If DEQ proposes to issue a final Toxic Air Contaminant Permit Attachment based on the Level 1 Risk Assessment Tool, DEQ must follow the Category II public notice procedure in OAR chapter 340, division 209.

(6) Level 2 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by modeling emissions to determine air concentrations at exposure locations approved by DEQ using AERSCREEN or another substantially equivalent screening model approved by DEQ. If DEQ proposes to issue a final Toxic Air Contaminant Permit Attachment based on the Level 2 Source Risk Assessment, DEQ must follow the Category II public notice procedure in OAR chapter 340, division 209.

(7) Level 3 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by modeling emissions to determine air concentrations at exposure locations approved by DEQ using AERMOD or another substantially equivalent complex model approved by DEQ. If DEQ proposes to issue a final Toxic Air Contaminant Permit Attachment based on the Level 3 Source Risk Assessment, DEQ must follow the Category III public notice procedure in OAR chapter 340, division 209.

(8) Level 4 Source Risk Assessment.

The owner or operator must assess toxic air contaminant emissions by performing a Comprehensive Health Risk Assessment as specified in OAR 340-245-0210 and approved by DEQ. If DEQ proposes to issue a final Toxic Air Contaminant Permit Attachment based on the Level 4 Source Risk Assessment, DEQ must follow the Category III public notice procedure in OAR chapter 340, division 209.

(9) Recordkeeping. The owner or operator of a source that is subject to this rule must retain a record of any risk assessment for five years from the date the risk assessment is submitted to DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0200

Modeling Requirements

(1) Purpose. Air Quality modeling is the basis for all risk assessment levels in Cleaner Air Oregon. The Level 1 Source Risk Assessment uses a Lookup Table developed using the AERMOD air dispersion model. The Level 2 Source Risk Assessment uses AERSCREEN, the screening version of AERMOD. Level 3 and 4 Risk Assessments use AERMOD. In all cases, the model provides concentrations in air that are compared to the Risk Based Concentrations to estimate risk as part of the Comprehensive Health Risk Assessment process in OAR 340-245-0210.

(2) When required to perform modeling, the owner or operator of a source must first submit a modeling protocol to DEQ for approval. The modeling protocol must be approved by DEQ before the owner or operator may submit modeling results and the risk assessment based on that modeling. When an owner or operator undertakes a Level 4 Source Risk Assessment, DEQ must consider whether to approve the modeling protocol concurrently with DEQ's review of the proposed Comprehensive Health Risk Assessment work plan, as provided under OAR 340-245-0210.

(3) All modeled estimates of ambient concentrations required under this division must be based on the applicable air quality models and other requirements as specified in 40 CFR part 51, Appendix W, "Guidelines on Air Quality Models (Revised)." Any change or substitution from models and procedures specified in 40 CFR part 51, Appendix W must be approved by DEQ in advance and incorporated in the modeling protocol. AERSCREEN and AERMOD are examples of approved air quality models.

(4) Modeling of toxic air contaminant emissions will be based on the source's PTE, requested PTE or risk limits, or requested actual toxic air contaminant emission rates.

(5)(a) When a Level 2, 3 or 4 Source Risk Assessment under OAR 340-245-0080(6) through (8) is performed, the exposure locations where ambient concentrations will be modeled, including but not limited to residential areas, commercial areas, and public space, must be identified by the owner or operator and is subject to approval by DEQ as part of the modeling protocol.

(b) Notwithstanding the definition of exposure location in OAR 340-245-0020, an owner or operator may provide documentation to demonstrate an area is not being used in the manner allowed by the land use zoning at the time the modeling is to be performed.

(A) If DEQ determines the documentation is adequate to make this demonstration, DEQ must allow the exclusion of chronic exposure locations based on these zoned areas from the modeling.

(B) If DEQ grants this exclusion, the owner or operator must annually submit to DEQ documentation showing the excluded zoned areas continue to not be used in the manner allowed by the land use zoning applicable to the area.

(6) The owner or operator must submit to DEQ all information that DEQ determines is necessary to perform any modeling required under this division. The information that is necessary will depend on the model being used and may include, but is not limited to:

(a) Emissions data for all existing and proposed emission points from the entire source or the new or modified TEU, as applicable. This data must include the following for the relevant averaging times:

(A) The actual toxic air contaminant emission rate; or

(B) The emissions based on a requested PTE or risk limit;

(b) Stack parameter and building data, including stack height above ground, exit diameter, exit velocity, and exit temperature, for all existing and proposed emission points from the source, and dimension data of buildings that could potentially affect downwash;

(c) Meteorological and topographical data;

(d) Information about the dispersion models and modeling parameters used; and

(e) Other information that may be necessary to estimate air quality concentrations and risk at exposure locations.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0210

Level 3 and 4 Source Risk Assessment Requirements

(1) When required to conduct a Level 3 or Level 4 Source Risk Assessment, the owner or operator of a source must first submit to DEQ a Source Risk Assessment work plan for DEQ's approval as required in OAR 340-245-0050. The work plan must be developed in consultation with DEQ and approved by DEQ before the owner or operator conducts the Source Risk Assessment.

(2) Elements of a risk assessment.

(a) The Level 3 and Level 4 Source Risk Assessment must include but is not limited to:

(A) An application for a Toxic Air Contaminant Permit Attachment;

(B) A problem formulation step ending with development of a conceptual site model identifying TEUs and existing and reasonably likely future human populations that may be exposed to toxic air contaminant emissions from the source, including residents, nonresident adults, and nonresident children and other sensitive populations;

(C) An exposure assessment that models or measures toxic air contaminant concentrations at locations of existing and reasonably likely future human populations that may be exposed to toxic air contaminant emissions from the source;

(D) A risk characterization presenting a quantitative evaluation of potential cancer, chronic noncancer and acute noncancer health risks associated with human exposure to toxic air contaminant emissions from the source; and

(E) A quantitative or qualitative uncertainty evaluation of appropriate elements of the risk assessment.

(b) A Level 4 Comprehensive Health Risk Assessment, in addition to the requirements in subsection (a), must include a toxicity assessment evaluating the carcinogenic effects, noncarcinogenic chronic effects, and noncarcinogenic acute effects of toxic air contaminants to which human populations may be exposed, and determining persistence and bioaccumulation potential. DEQ may not consider toxicity reference values other than those listed in OAR 340-245-8030 Table 3;

(c) In a Level 4 Comprehensive Health Risk Assessment, the owner or operator may propose modifications to default exposure assumptions, including but not limited to the following:

(A) Exposure times, frequencies, and durations;

(B) Relative bioavailability of chemicals; and

(C) Multipathway considerations for persistent, and bioaccumulative and toxic chemicals included in OAR 340-245-8040 Table 4;

(3) Approval of a Level 3 or Level 4 Source Risk Assessment.

(a) DEQ must use the procedures in OAR 340-245-0050 to review the Level 3 or Level 4 Source Risk Assessment, determine its completeness, and ask for additional information, if needed.

(b) If DEQ concludes that the Source Risk Assessment is complete, then DEQ must approve or reject the Source Risk Assessment as part of its consideration of whether to issue a Toxic Air Contaminant Permit Attachment under, and following the procedures of, OAR 340-245-0300(7). DEQ's approval or rejection of the Source Risk Assessment will be based on whether:

(A) The Source Risk Assessment was prepared consistent with the approved work plan; and

(B) The information provided is complete and accurate.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0220

Risk Reduction Plan Requirements

- (1) Purpose. The purpose of a Risk Reduction Plan is to allow an existing source to:
 - (a) Reduce risk to less than or equal to the Risk Reduction Level within a reasonable, specified period of time; and
 - (b) Reduce risk to less than or equal to the TBACT Level within a reasonable, specified period of time; or
 - (c) Reduce risk as much as possible through a TBACT plan under OAR 340-245-0230 for a source that is not able to reduce risk to less than or equal to the TBACT Level.
- (2) DEQ may not require an existing source that employs TBACT on all significant TEUs to undertake additional risk reduction measures to limit or reduce toxic air contaminant emissions unless the source risk is above the Risk Reduction Level.
- (3) Application. The owner or operator of an existing source that is requesting approval of a Risk Reduction Plan must submit to DEQ the following:
 - (a) An application for a Toxic Air Contaminant Permit Attachment;
 - (b) Two air contaminant emissions inventories:
 - (A) An emissions inventory for the source before implementation of the proposed Risk Reduction Plan measures; and
 - (B) An emissions inventory for the source after implementation of the proposed Risk Reduction Plan measures;
 - (c) The results of a Source Risk Assessment performed under OAR 340-245-0080(7) or (8) including the potential risk before and after full implementation of the Risk Reduction Plan;
 - (d) The proposed Risk Reduction Plan, which must include the following:
 - (A) Identification of each TEU from which risk will be reduced;
 - (B) For each TEU identified in paragraph (A), a description of how risk will be reduced; and
 - (C) A schedule for implementing the proposed Risk Reduction Plan measures within the time frames allowed under section (7), if not sooner. The schedule must specify:
 - (i) The dates by which the source will implement the proposed Risk Reduction Plan measures;
 - (ii) The dates for submittal of periodic reports showing progress toward completion of the proposed Risk Reduction Plan measures. Progress reports should include achievement of significant milestones, such as but not limited to dates of equipment delivery and construction progress; and

(iii) The dates for submittal of applications for permits to construct or modify, not to exceed 90 days after approval of the Risk Reduction Plan, or other time period approved by DEQ;

(e) The proposed Source Risk Limits; and

(f) Certification of the Risk Reduction Plan as meeting all requirements by an individual who is officially responsible for the processes and operations of the source.

(4) If the owner or operator of the source is not able to reduce risk to less than or equal to the TBACT Level through the Risk Reduction Plan, the owner or operator must submit a TBACT plan required under OAR 340-245-0230 as part of its Risk Reduction Plan.

(5) The owner or operator may request a postponement of risk reduction under OAR 340-245-0235.

(6) Approval of Risk Reduction Plan.

(a) DEQ must use the procedures in OAR 340-245-0050 to review the Risk Reduction Plan, determine its completeness, and ask for additional information, if needed.

(b) If DEQ concludes that the Risk Reduction Plan is complete, then DEQ must approve or reject the Risk Reduction Plan as part of its consideration of whether to issue a Toxic Air Contaminant Permit Attachment under, and following the procedures of, OAR 340-245-0300(7). DEQ's approval or rejection of the Risk Reduction Plan must be based on whether:

(A) The information provided is complete and accurate; and

(B) The Risk Reduction Plan has the ability to:

(i) Reduce risk to less than or equal to the Risk Reduction Level within a reasonable, specified period of time; and

(ii) Reduce risk to less than or equal to the TBACT Level within a reasonable, specified period of time; or

(iii) Reduce risk as much as possible through a TBACT plan under OAR 340-245-0230 for a source that is not able to reduce risk to less than or equal to the TBACT Level.

(7) Risk Reduction Plan implementation requirements.

Upon approval, the owner or operator must implement Risk Reduction Plan measures by the dates specified in the Toxic Air Contaminant Permit Attachment.

(a) The owner or operator of a source that, at the time of approval of the Risk Reduction Plan, has either or both a cancer or chronic noncancer source risk that is greater than the TBACT Level must implement the Risk Reduction Plan on the following timeline:

(A) The owner or operator must fully implement the Risk Reduction Plan within two years from the effective date of the Toxic Air Contaminant Permit Attachment; and

(B) The owner or operator must apply for a permit modification to request additional time to implement risk reduction measures as specified under OAR 340-245-0300(10), if necessary. DEQ may allow the owner or operator not more than two additional years beyond the initial two years to implement the required risk reduction measures and achieve required risk reductions.

(b) The owner or operator of a source that, at the time of approval of the risk assessment or upon approval of the Cleaner Air Oregon Ambient Monitoring results, has acute risk that is greater than the TBACT Level and the source does not have TBACT installed on all significant TEUs or has acute risk that is greater than the Risk Reduction Level must implement the Risk Reduction Plan on the following timeline:

(A) The owner or operator must fully implement the Risk Reduction Plan within 1 month from the effective date of the Toxic Air Contaminant Permit Attachment; or

(B) DEQ may allow the owner or operator up to six months after the effective date of the Toxic Air Contaminant Permit Attachment based on health factors including but not limited to severity of acute health effect, degree of scientific certainty, and averaging time of the acute TRV used to develop the RBC.

(c) The owner or operator of a source that, at the time of approval of the Risk Reduction Plan, has risk that is greater than the Risk Reduction Level, must implement the Risk reduction Plan on the following timeline:

(A) The owner or operator must reduce risk to less than or equal to the Risk Reduction Level within two years from the effective date of the Toxic Air Contaminant Permit Attachment; and

(B) The owner or operator must apply for a permit modification to request additional time to implement risk reduction measures as specified under OAR 340-245-0300(10), if necessary. DEQ may allow the owner or operator three additional years beyond the initial two years to implement additional risk reduction measures and achieve required risk reductions to comply with the Risk Reduction Level.

(8) Reporting Requirements.

(a) The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Attachment that includes a Risk Reduction Plan must submit twice-annual progress reports to DEQ describing the source's progress in reducing toxic air contaminant emissions and risk reductions achieved by the Risk Reduction Plan, including risk reductions due to TBACT implementation. The progress report(s) are due to DEQ on or before February 15 and July 31 of each year the Risk Reduction Plan is in effect, or other dates approved in the Toxic Air Contaminant Permit Attachment. The progress reports must include at a minimum all of the following:

(A) The increments of progress achieved in implementing the risk reduction measures specified in the Risk Reduction Plan;

- (B) A schedule indicating dates for future increments of progress;
 - (C) A description of any increases or decreases in emissions of toxic air contaminants that have occurred at the source since approval of the Risk Reduction Plan;
 - (D) An estimate of when all Risk Reduction Plan elements will be completed; and
 - (E) Dates for demonstrating the effectiveness of risk reduction measures.
- (b) The owner or operator must submit a Risk Reduction Plan completion report to DEQ no more than 60 days after completing all Risk Reduction Plan requirements. The report must include:
- (A) The final increments of progress achieved in fully implementing the risk reduction measures specified in the Risk Reduction Plan;
 - (B) The date the final increments of progress were achieved;
 - (C) The results of the demonstration of the effectiveness of the Risk Reduction Plan measures; and
 - (D) The remaining source risk after completion of all risk reduction measures.
- (c) No more than 60 days after completing all Risk Reduction Plan requirements, the owner or operator must notify DEQ that the Risk Reduction Plan has been completed.
- (9) Voluntary Risk Reductions. DEQ may not require the owner or operator of an existing source whose risk is less than the TBACT Level and that volunteers to reduce risk below the Community Engagement Level to comply with OAR 340-245-0250 Community Engagement.
- (a) Voluntary Risk Reduction Plan.
- (A) An owner or operator of a source that has risk greater than the Community Engagement Level and less than the TBACT Level may submit for approval a Voluntary Risk Reduction Plan to reduce risk to below the Community Engagement Level after being called into Cleaner Air Oregon under OAR 340-245-0040.
 - (B) The Voluntary Risk Reduction Plan must follow the requirements and procedures in OAR 340-245-0220, Risk Reduction Plan Requirements.
- (b) Approval of Voluntary Risk Reduction Plans. DEQ must approve or reject the Voluntary Risk Reduction Plan in accordance with the procedures OAR 340-245-0220(6).
- (c) The owner or operator must fully implement the Voluntary Risk Reduction Plan within two years from the effective date of the Toxic Air Contaminant Permit Attachment.
- (d) The owner or operator must apply for a permit modification to request additional time to implement risk reduction measures as specified under OAR 340-245-0300(10). DEQ may allow

the owner or operator two additional years beyond the initial two years to implement the required risk reduction measures and achieve the voluntary risk reductions.

(e) If the owner or operator does not implement the Voluntary Risk Reduction Plan within the approved time, DEQ may initiate the Community Engagement requirements, under OAR 340-245-0250.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0230

TBACT Plan Requirements

(1) Purpose. The purpose of a TBACT plan is to allow the existing source to reduce risk as much as reasonably possible by meeting TBACT for all significant TEUs within a reasonable, specified period of time if the source is not able to reduce risk to less than or equal to the TBACT Level. The TBACT plan is part of the Risk Reduction Plan.

(2) Application. In addition to the application requirements in OAR 340-245-0220, the owner or operator of a source that is requesting approval of a TBACT plan must also submit the proposed TBACT Plan, which must include the following:

(a) A demonstration that all significant TEUs at the source meet TBACT under OAR 340-245-0330; or

(b) A demonstration that all significant TEUs at the source will meet TBACT when the plan is fully implemented under OAR 340-245-0330. For each TEU, provide:

(A) The TBACT evaluation under OAR 340-245-0330; and

(B) A schedule for implementing the proposed TBACT plan measures within the time frames allowed under section (3), if not sooner.

(3) TBACT plan implementation requirements.

Upon approval, the owner or operator must implement TBACT plan measures by the dates specified in the Toxic Air Contaminant Permit Attachment. An owner or operator of a source that, at the time of TBACT plan approval, has risk that is greater than the TBACT Level and doesn't have TBACT installed on all significant TEU must implement the TBACT plan on the following timeline:

(a) The owner or operator must fully implement the TBACT plan within two years from the effective date of the Toxic Air Contaminant Permit Attachment; and

(b) The owner or operator must apply for a permit modification to request additional time to implement risk reduction measures as specified under OAR 340-245-0300(10). DEQ may allow the owner or operator two additional years beyond the initial two years to implement risk reduction measures and achieve required risk reductions.

(4) Periodic TBACT Review. The owner or operator of the source must perform periodic TBACT reviews and submit periodic TBACT updates as follows:

(a) For all significant TEUs for which the most recent TBACT determination concludes that no toxic air contaminant emission limits or additional control measure is required, submit an annual TBACT update report to DEQ with each annual report required by the Toxic Air Contaminant Permit Attachment; and

(b) For all significant TEUs that currently meet TBACT through toxic air contaminant emission limits or control measures, the owner or operator must submit TBACT update reports to DEQ upon the following:

(A) The owner or operator learns of new technology that could materially reduce toxic air contaminant emissions beyond currently implemented TBACT and further reduce cancer risk by 25 in 1 million or by a hazard index of 1;

(B) EPA performs an update of an applicable Risk and Technology Review required by the Clean Air Act after the application of a NESHAP that applies to the source or a TEU; or

(C) DEQ requests an updated TBACT report.

(c) The TBACT update reports must include the following:

(A) A review identifying all new or improved emissions control measures that can apply to any of the significant TEUs at the source, whether they are currently controlled or not;

(B) For each new or improved emissions control measure identified, a statement whether or not the owner or operator intends to install the control measure, and if the owner or operator intends to install the control measure, then the owner or operator must provide an estimated date by which the control measure will be installed; and

(C) For each new or improved emissions control measure identified that the owner or operator does not intend to install, the owner or operator must provide justification for not installing it, including at a minimum, a review following the procedures of OAR 340-245-0330(3).

(d) The requirement to perform periodic TBACT reviews and submit periodic TBACT update reports under subsections (a) and (b) must continue until such time as the risk from the source no longer exceeds the applicable TBACT Risk Level. If a TEU is equipped with new or improved control measures under this section, future TBACT reviews must still include review of new or improved control measures for that TEU.

(e) When a new or improved emissions control measure is identified under subsection (c), DEQ must review the control measure and any justification provided by the owner or operator for not installing the control measure, and will make a preliminary determination with regard to whether or not the control measure must be installed.

(A) If DEQ's preliminary determination is that the control measure must be installed, DEQ must provide the owner or operator with notice and opportunity to provide input on a final determination. In making the final determination, DEQ must take into consideration the following:

- (i) The remaining service life of any existing emission control system that would be replaced;
- (ii) The relative effectiveness of the new or improved control measure to reduce the source risk as compared to the risk using the existing control measure;
- (iii) The cost of installation and operation, including the cost of removing any existing control measure; and
- (iv) Any other factors that DEQ finds are relevant.

(B) If DEQ's final determination is that the control measure must be installed, DEQ must:

- (i) After consultation with the owner or operator, determine the date by which the control measure must be installed within a reasonable time frame; and
- (ii) Determine a new Source Risk Limit based on information on the amount of toxic air contaminants removed by the control measure and issue an amended Toxic Air Contaminant Permit Attachment.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0235

Postponement of Risk Reduction

(1) Postponement of risk reduction is only available for existing sources and cannot be used if risk is over the Immediate Curtailment Risk Action Levels. An owner or operator can request postponement of risk for one five year period. After that five year period, the owner or operator must reduce risk in accordance with OAR 340-245-0220 or 340-245-0230.

(2) An owner or operator of an existing source requesting postponement of the requirement to meet TBACT or make other physical, operational or process changes to reduce risk for one or more significant TEUs must submit a request to DEQ that includes the following:

- (a) Information proving inability to pay;

- (b) The TEUs for which the postponement is being requested;
 - (c) A determination of:
 - (A) The TBACT or other physical, operational or process changes that could be made to reduce risk; and
 - (B) The cost to install, operate and maintain each emission reduction measure identified in paragraph (A) for which a postponement is being requested.
 - (d) The number of employees at the source; and
 - (e) A description of any other emission reduction measures that will be taken to reduce risk in lieu of implementing each emission reduction measure identified in paragraph (A) for which a postponement is being requested.
- (3) An owner or operator must include a postponement request in the source's Toxic Air Contaminant Permit Attachment application under OAR 340-245-0300.
- (4) The owner or operator making a request:
- (a) Has the burden of proving inability to pay; and
 - (b) Is required to provide DEQ, on a confidential basis if the information meets the requirements of OAR 340-214-0130, audited financial information about the source. The information will include federal tax returns for the most recent three years, the most current year's audited financial statement, a signed auditor's statement provided by a certified public accountant, the source's latest income statement and balance sheet, and a completed DEQ form Statement of Financial Condition for Businesses or Statement of Financial Condition for Individuals. DEQ must hold the information as confidential to the extent consistent with the public records law.
- (5) DEQ must do the following upon receipt of the application:
- (a) Review the request;
 - (b) Determine, in DEQ's judgment and discretion, whether the source is able to pay for the installation, maintenance and operation of TBACT;
 - (A) In considering the owner's or operator's ability to pay, DEQ may use the applicable U.S. Environmental Protection Agency's ABEL, INDIPAY or MUNIPAY computer models to evaluate an owner's or operator's financial condition or ability to pay the full cost of meeting TBACT in accordance with EPA standards for determining ability to pay. DEQ may generally determine that the owner or operator is able to pay if the model results show that the owner or operator has a 70% probability of being able to absorb the cost of installing TBACT;
 - (B) Ability to pay in each of the EPA models is based on cash flows and the ability to take on additional debt in the amount owed to install TBACT;

(C) Upon request of the owner or operator, DEQ must provide the name and the version of the model used and respond to any reasonable request for information about the content or operation of the model;

(c) Evaluate the following at exposure locations that will exceed an applicable Risk Action Level:

(A) The presence of sensitive populations;

(B) The percentile of persons with low income, minority persons, and residents under 5 years old; and

(C) Total population resident within one kilometer of the source; and

(d) Consider both the potential economic harm to the business of requiring that the identified risk reductions be made against the burden of risk to the exposed population if the risk reductions are postponed.

(6) Negotiation and consultation.

(a) DEQ may attempt to negotiate alternatives to the postponement with the owner or operator, and may consider such alternatives in the final determination regarding the postponement; and

(b) DEQ must consult with OHA, local elected officials, local Indian governing bodies, and state and federal agencies that have jurisdiction in the notification area, before making a final determination regarding the postponement.

(7) DEQ may grant a request for postponement of risk reduction in full or in part and may impose any conditions, implementation of reasonable alternative measures, and implementation schedules that DEQ determines are appropriate.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0240

Cleaner Air Oregon Ambient Monitoring Requirements

(1) Cleaner Air Oregon Ambient Monitoring can be proposed by an owner or operator or can be required by DEQ.

(2) Cleaner Air Oregon Ambient Monitoring requirements.

(a) Cleaner Air Oregon Ambient Monitoring must be conducted following a Cleaner Air Oregon Ambient Monitoring Plan developed in accordance with the Cleaner Air Oregon Ambient Monitoring Plan Protocol and approved by DEQ.

(b) Cleaner Air Oregon Ambient Monitoring must be conducted for a period of not less than 12 months. There must be at least 12 months of valid data with greater than 75 percent data completeness per quarter.

(c) The owner or operator may request to use ambient monitoring performed by DEQ to meet the requirements of this rule. DEQ must review the ambient monitoring results to determine if it meets all of the data quality objectives in this rule before approving or denying the request.

(3) Application. The owner or operator requesting approval of a Cleaner Air Oregon Ambient Monitoring Plan must submit the following:

(a) An application for a Toxic Air Contaminant Permit Attachment that includes a Level 3 or Level 4 Source Risk Assessment; and

(b) A proposed Cleaner Air Oregon Ambient Monitoring Plan that complies with section (4).

(4) A proposed Cleaner Air Oregon Ambient Monitoring Plan must include the following:

(a) Identification of all toxic air contaminants that will be monitored;

(b) A description of all proposed monitoring locations;

(c) A description of the monitoring and analysis protocols for each toxic air contaminant to be monitored, including at a minimum:

(A) The monitoring equipment and methods to be used for each toxic air contaminant;

(B) The frequency of sampling at each monitoring location and the duration of each sample (i.e., the length of time in hours that each sample runs);

(C) Analytical methods and the analytical method detection and reporting limits to be used for each toxic air contaminant;

(D) Quality assurance and quality control measures to be taken and who will be performing these measures; and

(E) Descriptions of security measures to protect the monitoring equipment.

(d) A description of how to determine and account for the ambient concentration of each toxic air contaminant that results from all causes other than the source under consideration, including natural and unknown causes;

(e) A description of how and where meteorological monitoring will be performed and the meteorology equipment used; and

(f) A description of how the data will be reduced and how often the results will be reported to DEQ. Results must be reported on at least a monthly basis.

(5) Approval of Cleaner Air Oregon Ambient Monitoring Plan.

(a) DEQ must use the procedures in OAR 340-245-0050 to review the Cleaner Air Oregon Ambient Monitoring Plan, determine its completeness, and ask for additional information, if needed.

(b) If DEQ concludes that the Cleaner Air Oregon Ambient Monitoring Plan is complete, DEQ must approve or reject the Cleaner Air Oregon Ambient Monitoring Plan as part of its consideration of whether to issue a Toxic Air Contaminant Permit Attachment under, and following the procedures of, OAR 340-245-0300(7). DEQ's approval or rejection will be based on whether:

(A) The Cleaner Air Oregon Ambient Monitoring Plan is prepared consistent with the Cleaner Air Oregon Ambient Monitoring Plan Protocol; and

(B) The information provided is complete and accurate.

(c) DEQ may work with the owner or operator to develop public information concerning an approved air monitoring plan and the timeline for the approved air monitoring plan.

(d) DEQ may not require the owner or operator or a source that elects to complete Cleaner Air Oregon Ambient Monitoring under an approved monitoring plan to reduce risk from toxic air contaminants emitted by the source unless the results of the air monitoring:

(A) Validate the modeling completed as part of the risk assessment required under section (2); or

(B) Otherwise lead DEQ to reasonably conclude that the public health risks from Toxic Air Contaminants emitted by the source exceed a cancer risk of 200 in 1 million or a hazard index of 20.

(6) Reporting Requirements. The owner or operator of a source that has been issued a Toxic Air Contaminant Permit Attachment that includes ambient monitoring requirements must report the following information to DEQ:

(a) Monthly monitoring result reports, no more than 15 days after all monitoring data becomes available for the month to which the data applies. The reports must include at a minimum all of the following:

(A) Ambient toxic air contaminant concentrations, all 24-hour risks and all monthly average risks from all monitoring locations specified in the Cleaner Air Oregon Ambient Monitoring Plan;

(B) Meteorological data summary;

(C) Production data; and

(D) A description of any excess emissions or upset conditions that may affect the ambient toxic air contaminant concentrations monitored, including conditions outside the property boundary that may affect ambient air (i.e., forest fires, house fires, train derailments, etc.);

(b) Submit a Cleaner Air Oregon Ambient Monitoring final report in accordance with the DEQ approved Cleaner Air Oregon Ambient Monitoring Plan that also includes a description of any process changes that have occurred during the ambient monitoring period that may affect the results of the monitoring, to DEQ no more than 60 calendar days after completing all Cleaner Air Oregon Ambient Monitoring Plan requirements; and

(c) No more than 60 calendar days after completing all Cleaner Air Oregon Ambient Monitoring Plan requirements, the owner or operator must notify DEQ that the Cleaner Air Oregon Ambient Monitoring Plan has been completed.

(7) Ambient monitoring results.

(a) The owner or operator must submit to DEQ the ambient monitoring data and assessment of risk based on the ambient monitoring upon completion.

(b) For all toxic air contaminants that are not monitored, the owner or operator must use the modeled concentrations of those toxic air contaminants and add the risk from the modeled concentrations to the risk from the monitored concentrations to arrive at a total risk from the source.

(c) Upon receipt of ambient monitoring data and assessment of risk under subsection (a), DEQ must review the ambient monitoring data and assessment of risk and determine if they are acceptable to DEQ.

(A) If Cleaner Air Oregon Ambient Monitoring results are available, approved by DEQ, and show lower or equal risk than any risk determined by the risk assessment required under OAR 340-245-0080(1)(a)(C) before DEQ issues a Toxic Air Contaminant Permit Attachment, the owner or operator may submit a revised application that may include a revised TBACT plan that reflects the approved Cleaner Air Oregon Ambient monitoring results.

(B) If Cleaner Air Oregon Ambient Monitoring results are available, approved by DEQ, and show lower or equal risk than any risk determined by the risk assessment required under OAR 340-245-0080(1)(a)(C) after DEQ issues a Toxic Air Contaminant Permit Attachment, the owner or operator may request a modification of the Toxic Air Contaminant Permit Attachment that may include a revised TBACT plan that reflects the approved Cleaner Air Oregon Ambient Monitoring results.

(C) If Cleaner Air Oregon Ambient Monitoring results are available, approved by DEQ, and show higher risk than any risk determined by the risk assessment required under OAR 340-245-0080(1)(a)(C), then the owner or operator must comply with paragraphs (A) or (B) as applicable based on the higher risk results. If DEQ has issued a Toxic Air Contaminant Permit Attachment and any risk exceeds a Source Risk Limit, then the owner or operator must request a modification of the Toxic Air Contaminant Permit Attachment to revise the Source Risk Limit and, if necessary, must also develop or revise the Risk Reduction Plan.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0250

Community Engagement

The purpose of community engagement is to notify the community affected by a source's toxic air contaminant emissions. The requirements of this rule are intended to ensure that consideration of Environmental Justice is appropriately emphasized throughout implementation of Cleaner Air Oregon.

(1) DEQ must use a developed a community notification system when permit attachment applications are received. Applications will also be posted on DEQ's website.

(2) DEQ must provide community engagement for new, reconstructed and existing sources who request Source Risk Limits greater than any of the Community Engagement Levels. The owner or operator of a source that requires community engagement must pay the applicable community engagement fee specified in OAR 340-216-8030 Table 3 in addition to the other applicable application fees upon submitting the application. DEQ must send a letter to all addresses in the notification area to announce a community engagement meeting 30 days before the community engagement meeting, after performing a preliminary review of the risk assessment. Community Engagement is in addition to public notice required under OAR 340-245-0080.

(3) Public notification of Community Engagement Meetings.

(a) DEQ must provide public notification in either the notification area or within the area where risk is greater than the Community Engagement Level, whichever is larger. Public notification efforts must be tailored to ensure that sensitive populations in the community are reached. If the owner or operator has a public website that is specific to the source requiring community engagement, the owner or operator must post notice of the meeting on the website.

(b) DEQ must develop a map or other description of the boundary of the area and provide written notice via U.S. mail or an express mail service to the following:

(A) All addresses within the area, including schools, daycare centers, community groups, hospitals, nursing homes, and long-term care facility locations that are entirely or partially within the area and residences in the area;

(B) Official neighborhood associations for any neighborhoods entirely or partly within the notification area. If there are no official neighborhood associations, then DEQ must place a notice in the local newspaper; and

(C) Local elected officials, local Indian governing bodies, local public health officers, and state and federal agencies that have jurisdiction in the area; and

(c) Public notification materials. DEQ must identify the appropriate communication materials and approaches to ensure that community member have sufficient understanding of the technical background to be able to meaningfully engage and provide comment. Not less than 14 days

before any community engagement meetings required by OAR 340-245-0220, 340-245-0230 or 340-245-0240, DEQ must post the public notification materials on DEQ's website. DEQ must provide translation of public notice materials whenever necessary.

(d) The written notice for the community engagement meeting must include the following information:

(A) An invitation to a community engagement meeting with information about the time, date and location;

(B) Identifying information, including the name of the company that owns or operates the source, the owner's or operator's mailing address, the source address, website address, the nature of business, name and phone number of the primary contact at the source, permit number, SIC or NAICS code of the source and name, phone number and email address for submitting complaints about the company; and

(C) Copies of the risk assessment required under OAR 340-245-0080(7) or (8), either in hardcopy at the community engagement meeting or electronically at a specified link or website.

(4) Community Engagement Meetings. The purpose of the community engagement meeting is to inform the community about the details of the risk assessment performed by the source and DEQ's preliminary review of the risk assessment. The community will be able to provide input on the risk assessment, such as verifying the accuracy of the exposure locations and commenting on any proposed risk reduction methods before DEQ drafts the Toxic Air Contaminant Permit Attachment. The following procedures for community engagement meetings will apply:

(a) Community engagement meetings must be scheduled on a weekday evening, or other time that is convenient to the majority of community attendees, at a location that is Americans with Disabilities Act compliant, is convenient for community members to attend and can be accessed by public transportation, if available. DEQ must reserve a venue for the community engagement meeting, arrange for audio and visual equipment and personnel to be available at the site, and provide necessary language translation.

(b) The agenda for the community engagement meeting must include presentations by DEQ and the owner or operator or its representative. DEQ and the owner or operator or its representative will also be available for a question and answer period for the community engagement meeting attendees. The following topics must be included in the presentation:

(A) Description of the source: type of operation, processes involved, and materials used or produced at the source;

(B) Description of the Level 3 Source Risk Assessment under OAR 340-245-0080(7) or the Level 4 Source Risk Assessment under OAR 340-245-0080(8), whichever is submitted by the owner or operator;

(C) Description of the source's emissions and results of the Source Risk Assessment;

- (D) Description of the source's projects or plans to reduce toxic emissions or risk, if any;
 - (E) Request for postponement of risk reduction, if applicable; and
 - (F) Description of the source's last five years of air quality compliance history with DEQ.
- (c) DEQ must make a sufficient number of copies of written informational materials available for distribution to community engagement meeting attendees.
- (5) Prior to the community engagement meeting, DEQ recommends arranging a meeting between DEQ and the owner or operator to discuss community engagement meeting plans, including the appropriate persons to attend and assist in the source's presentation and participation at such meetings.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0300

Toxic Air Contaminant Permit Attachments

- (1) Purpose and Intent.
 - (a) A Toxic Air Contaminant Permit Attachment is used to:
 - (A) Authorize owners or operators of a source to construct or modify equipment, processes and activities that discharge toxic air contaminants;
 - (B) Authorize owners or operators of a source to discharge toxic air contaminants from new and existing processes and activities in accordance with the requirements, limitations, and conditions of the Toxic Air Contaminant Permit Attachment;
 - (C) Approve, modify and implement a Risk Reduction Plan, which may include a TBACT plan, and require the owner or operator of a source to implement the ongoing requirements; and
 - (D) Approve, modify and implement a Cleaner Air Oregon Ambient Monitoring Plan.
 - (b) A Toxic Air Contaminant Permit Attachment must be attached to a valid operating or construction permit, and may not be issued to an owner or operator before the source has obtained an operating or construction permit.
 - (c) A Toxic Air Contaminant Permit Attachment functions as a permanent attachment to an operating or construction permit and will not be incorporated into an operating or construction permit.
 - (d) DEQ may establish Source Risk Limits in a Toxic Air Contaminant Permit Attachment for the purpose of limiting the PTE of toxic air contaminants or the risk from a source.

(2) The criteria, requirements and fees pertaining to Toxic Air Contaminant Permit Attachments are specified in this division, in OAR 340-216-0069, OAR 340-216-8020 Table 2, OAR 340-216-8030 Table 3 and OAR 340-220-0050.

(3) A Toxic Air Contaminant Permit Attachment is issued to an owner or operator of a source in addition to the owner's or operator's operating or construction permit for the source. A Toxic Air Contaminant Permit Attachment will have no expiration date.

(4) A Basic Air Contaminant Discharge Permit under OAR 340-216-8010 Table 1, Part A, category 8 may only be issued when required under section (4).

(5) A Toxic Air Contaminant Permit Attachment may not be issued in lieu of an otherwise required operating or construction permit.

(6) Application Requirements. Any owner or operator requesting a new or modified Toxic Air Contaminant Permit Attachment must submit an application that includes all of the information specified in this section as well as the relevant information required under OAR 340-245-0080, except that DEQ may waive information that it deems unnecessary or duplicative. The owner or operator must submit all required information by the submittal deadlines in OAR 340-245-0050. The owner or operator must submit to DEQ at least two paper copies and one electronic copy of the application.

(a) Identifying information, including the name of the company that owns or operates the source, the owner's or operator's mailing address, the source address, and the nature of business, name and phone number of the primary contact at the source, permit number, and SIC or NAICS code of the source;

(b) The name and phone number of a local person employed by the owner or operator who is responsible for compliance with the permit;

(c) The name of a person authorized to receive requests for data and information;

(d) A description of the source's production processes and a flow chart of each process;

(e) A plot plan showing the location and height of air contaminant emissions locations at the source. The plot plan must also indicate the nearest residential and commercial property;

(f) The type and quantity of fuels used by the source;

(g) The amount and type of each toxic air contaminant actually emitted by the source in terms of daily or monthly and yearly rates, showing calculation procedures for the previous calendar year;

(h) An estimate of the amount and type of each toxic air contaminant emitted by the source in terms of daily or monthly and yearly rates, showing calculation procedures at the level to determine the Source Risk Limits;

(i) For sources whose risk is greater than or equal to the TBACT Level before any additional risk reduction measures are included to further reduce risk, a pollution prevention analysis that meets the requirements of OAR 340-245-0335.

(j) Information required for a Risk Reduction Plan under OAR 340-245-0220, if applicable;

(k) Information required for a TBACT plan under OAR 340-245-0230, if applicable;

(l) Information required for Cleaner Air Oregon Ambient Monitoring under OAR 340-245-0240, if applicable;

(m) Estimated efficiency of air pollution control devices in place at the source under present or anticipated operating conditions;

(n) Where the operation or maintenance of air pollution control devices and emission reduction processes can be adjusted or varied from the highest reasonable efficiency and effectiveness, information necessary for DEQ to establish operational and maintenance requirements in OAR 340-226-0120(1) and (2);

(o) A Land Use Compatibility Statement signed by a local, city or county, planner either approving or disapproving construction or modification of the source, if required by the local planning agency; and

(p) Any other information requested by DEQ.

(7) Application review and processing.

(a) DEQ must use the procedures in OAR 340-245-0050 to review the Toxic Air Contaminant Permit Attachment application, determine its completeness, and ask for additional information, if needed. (b) If DEQ determines that a Toxic Air Contaminant Permit Attachment is not required during preliminary review of an application or at any time during application processing, DEQ must notify the applicant in writing. Such notification is a final action by DEQ on the application.

(c) After DEQ considers an application complete, if DEQ is prepared to issue a Toxic Air Contaminant Permit Attachment, then DEQ must prepare a draft Toxic Air Contaminant Permit Attachment and a review report that sets forth the legal and factual basis for the draft Toxic Air Contaminant Permit Attachment conditions, including references to the applicable regulatory provisions, for public notice.

(d) DEQ must provide a copy of the draft Toxic Air Contaminant Permit Attachment to the owner or operator and will provide the owner or operator at least 7 days to review and provide feedback to DEQ regarding the draft Toxic Air Contaminant Permit Attachment. Following consideration of comments from the owner or operator, DEQ may revise the draft Toxic Air Contaminant Permit Attachment before placing it on public notice.

(e) Public notice requirements for new Toxic Air Contaminant Permit Attachment issuance.

(A) The minimum public notice procedures for issuance of a Toxic Air Contaminant Permit Attachment are listed in the applicable sections of OAR 340-245-0080. DEQ may enhance the public notice procedures at its discretion.

(i) DEQ must issue the proposed Toxic Air Contaminant Permit Attachment for public comment and provide a minimum of 40 days public notice for the public to submit written comments to DEQ; and

(ii) DEQ must schedule a public hearing at a reasonable time and place to allow interested persons to submit oral or written comments and provide a minimum of 30 days public notice for the hearing, which may be part of the 40 day public notice in subparagraph (i).

(B) DEQ must consider the public comments it receives under subsection (A) that are relevant to the draft permit attachment and within the scope of its legal authority, and then will determine whether to deny, revise, or issue a final Toxic Air Contaminant Permit Attachment.

(8) Toxic Air Contaminant Permit Attachment content.

(a) A Toxic Air Contaminant Permit Attachment must:

(A) Identify the owner or operator and the source that the Toxic Air Contaminant Permit Attachment is issued for;

(B) Include a list of all TEUs that are subject to a Toxic Air Contaminant Permit Attachment as well as all exempt TEUs and de minimis TEUs;

(C) Include a condition that lists the source's most recent risk assessment results and which risk assessment level was used to perform the risk assessment;

(D) Include permit conditions that contain Source Risk Limits to implement the requirements specified in OAR 340-245-0310;

(E) Include testing, monitoring, recordkeeping, and reporting requirements sufficient to determine compliance with all limits or requirements in the Toxic Air Contaminant Permit Attachment, as necessary;

(F) Include a requirement to construct according to approved plans, if applicable;

(G) Include complaint line information by providing an email address or phone number to the source's owner or operator, or its representative;

(H) At the discretion and option of the owner or operator, a description of the owner's or operator's plans to continue its dialogue with the community after DEQ has completed its notification requirements. This dialogue could take the form of establishing a community committee that meets regularly, newsletters, or source tours. DEQ encourages these efforts as a way to establish open communication and requests that sources keep DEQ informed about their communication activities.

(I) Include other limits and requirements as necessary to ensure compliance with the Cleaner Air Oregon rules;

(J) Include a compliance schedule to ensure compliance or progress toward compliance with the requirements in the Cleaner Air Oregon rules, as necessary; and

(K) Include a condition that requires the owner or operator to notify DEQ within 30 days of a change in zoning within 1.5 kilometers of the source.

(b) A Toxic Air Contaminant Permit Attachment may establish or revise any operating limits or conditions necessary under the Cleaner Air Oregon rules, including annual or short-term toxic air contaminant emission limits, conditions to limit risk from TEUs or the entire source, and operational limits for toxic air contaminants, including limits or levels that are equipment specific, process specific, or that apply to the entire source.

(c) A Toxic Air Contaminant Permit Attachment may not delete or revise conditions in an operating or construction permit, including Plant Site Emission Limits.

(d) The owner or operator must comply with the more stringent limit or requirement when conditions in an operating permit and a Toxic Air Contaminant Permit Attachment contain different limits or requirements.

(e) If a Toxic Air Contaminant Permit Attachment creates a conflict with conditions in a source's operating permit, the owner or operator must apply for a modification of the operating permit under the appropriate rules in OAR 340 chapters 216 or 218 to resolve the conflict.

(9) Distribution of the Toxic Air Contaminant Permit Attachment.

Following DEQ's issuance of the final Toxic Air Contaminant Permit Attachment that contains a Risk Reduction Plan or a Cleaner Air Oregon Ambient Monitoring Plan, the owner or operator must:

(a) Distribute the updated risk assessment and the Toxic Air Contaminant Permit Attachment in hardcopy or electronic format within 30 days of permit attachment issuance to all of the locations identified below within the notification area approved by DEQ.

(A) Official neighborhood associations;

(B) Schools;

(C) Daycare centers;

(D) Community groups and sensitive populations, including but not limited to hospitals, nursing homes, and long-term care facilities; and

(E) Local elected officials, local Indian governing bodies, and state and federal agencies that have jurisdiction in the area of impact; and

(b) Submit written notification to DEQ within 45 days of the Toxic Air Contaminant Permit Attachment issuance that the updated risk assessment, Risk Reduction Plan and the Toxic Air Contaminant Permit Attachment have been distributed as required under subsection (a).

(10) Procedures for Toxic Air Contaminant Permit Attachment Modification.

(a) Modifications initiated by the owner or operator. An owner or operator at any source that has been issued a Toxic Air Contaminant Permit Attachment must submit an application for a Toxic Air Contaminant Permit Attachment modification before making any of the following changes:

(A) Construct a new or modify a TEU;

(B) Increase source risk above a Source Risk Limit;

(C) Request an extension to a compliance date in a Toxic Air Contaminant Permit Attachment. The owner or operator must submit the application for extension at least 180 days before the compliance date specified in the current Toxic Air Contaminant Permit Attachment. Criteria for granting any extension include the following:

(i) The owner or operator has a clear plan towards meeting the Risk Action Level;

(ii) The owner or operator has made demonstrated progress; and

(iii) The owner or operator has submitted documentation proving that the delay is due to reasonably unforeseeable events beyond their control.

(D) Relocate a TEU or stack by more than 10 meters;

(E) Modify any physical modeling parameters, such as fence lines or building heights that affects the results of the risk assessment;

(F) Terminate postponement of risk reductions;

(G) The zoning in the area has changed in a way that could increase risk;

(H) Modify Cleaner Air Oregon Ambient Monitoring requirements; and

(I) Correct any incorrect submittals or failures to submit relevant information. The owner or operator who has submitted incorrect information or who fails to submit any relevant information in a risk assessment must promptly submit a corrected risk assessment upon becoming aware of such failure or incorrect submittal. This requirement is in addition to, and not in lieu of, a DEQ decision to commence an enforcement action against such owner or operator for such violation, as DEQ determines appropriate under the circumstances

(b) Modifications required by DEQ. When notified in writing by DEQ, the owner or operator of any source that has previously performed a Source Risk Assessment must update or correct the

previous Source Risk Assessment and submit an application for a Toxic Air Contaminant Permit Attachment modification if:

(A) DEQ determines through an investigation or file review that a previous Source Risk Assessment may contain errors or omissions that, when corrected, could increase the potential risk;

(B) An RBC in OAR 340-245-8050 Table 5 has been added or lowered that would substantially impact risks to exposed persons, implementation, or effectiveness of the Risk Reduction Plan;

(C) The source name changes or there is a change of ownership.

(c) To modify a Toxic Air Contaminant Permit Attachment, the owner or operator must submit a complete application for a modification of the Toxic Air Contaminant Permit Attachment, and pay the applicable attachment modification fees in subsection (f). The owner or operator must submit the application for modification to DEQ no more than 120 days after becoming aware of the need for a Toxic Air Contaminant Permit Attachment modification, except as required under paragraph (11)(a)(C), or after receipt of notification from DEQ. Upon request by the owner or operator, DEQ may allow the owner or operator an additional 60 days to submit the updated or corrected risk assessment based on the following criteria:

(A) The owner or operator has demonstrated progress in completing a risk assessment; and

(B) A delay is related to reasonably unforeseen changes in or lack of relevant data, changes in operations or other key parameters necessary to perform the risk assessment.

(d) The owner or operator must submit the necessary information required for the Toxic Air Contaminant Permit Attachment modification under section (7). Updating or correcting a risk assessment must be done in consultation with DEQ and must follow the applicable Source Risk Assessment requirements in OAR 340-245-0080.

(e) When DEQ receives an application to modify a Toxic Air Contaminant Permit Attachment DEQ must use the following public notice procedures:

(A) Category III public notice procedures in OAR 340 division 209 if the change will:

(i) Increase source risk;

(ii) Extend any compliance dates in a compliance schedule; or

(iii) Significantly change proposed control methods in a Risk Reduction Plan.

(B) Category I public notice procedures in OAR 340 division 209 for changes that do not increase the level of risk that the Risk Reduction Plan is intended to achieve.

(C) Category II public notice procedures in OAR 340 division 209 for all other types of permit changes not described in paragraphs (A) and (B).

(f) The fee for a Toxic Air Contaminant Permit Attachment modification is:

(A) The Complex Technical Modification fee under OAR 340-216-8020 Table Part 3 for modifications under paragraph (11)(e)(A);

(B) The Basic Technical Modification fee under OAR 340-216-8020 Table 2 Part 3 for modifications under paragraph (11)(e)(B); or

(C) The Moderate Technical Modification fee under OAR 340-216-8020 Table 2 Part 3 for modifications under paragraph (11)(e)(C).

(g) DEQ may modify a Toxic Air Contaminant Permit Attachment at the same time as the source's operating permit is being renewed or undergoing a significant or major modification, if DEQ deems such modification necessary. DEQ must follow the applicable public notice procedure for the Toxic Air Contaminant Permit Attachment modification under subsection (e), or the public notice procedure for the operating permit, whichever provides more public notice.

(11) Procedures for Toxic Air Contaminant Permit Attachment termination or revocation.

(a) DEQ may terminate or revoke a Toxic Air Contaminant Permit Attachment under the criteria in OAR 340-216-0082(2) or (4), or for the following reasons:

(A) DEQ determines that the Toxic Air Contaminant Permit Attachment is no longer required; or

(B) The source's operating permit is terminated or revoked.

(b) Public notice is not required for termination or revocation of a Toxic Air Contaminant Permit Attachment.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0310

Source Risk Limits

(1) The purpose of Source Risk Limits is to limit the chronic and acute risk from a source. DEQ may establish Source Risk Limits separately for each of the following risk categories: chronic cancer, chronic noncancer and acute noncancer risk.

(a) Source Risk Limits that are based on chronic risk apply on a rolling 12 consecutive month basis and limit the source's chronic risk or annual PTE, as applicable.

(b) Source Risk Limits that are based on acute risk apply on a daily basis and limit the source's acute risk or daily PTE, as applicable.

(c) DEQ may establish multiple chronic or acute noncancer Source Risk Limits for an individual source on a case-by-case basis to account for different target organs.

(2) Establishing Source Risk Limits. DEQ must establish Source Risk Limits on an individual source basis as follows:

(a) For new and existing sources whose risk is less than or equal to the Source Permit Level in OAR 340-245-0080 Table 1, DEQ must set Source Risk Limits at the Source Permit Level if a Toxic Air Contaminant Permit Attachment is required under OAR 340-245-0080(4)(b)(A).

(b) For new and existing sources whose risk is greater the Source Permit Level in OAR 340-245-0080 Table 1, DEQ may set Source Risk Limits at either of the following:

(A) The level requested by the owner or operator at either of the following toxic air contaminant emission rates used in the risk assessment required under OAR 340-245-0080:

(i) The actual toxic air contaminant emission rate of the source; or

(ii) A requested PTE or risk limit. The owner or operator should request a level that is high enough to anticipate fluctuations in production for the foreseeable future; or

(B) The TLAER level, the TBACT level or the Risk Reduction Level, whichever is applicable.

(3) Owners or operators may choose the type of risk limit that will be included in their Toxic Air Contaminant Permit Attachment. The owner or operator may choose a limit on emissions, a limit on source operation, or a limit on risk.

(a) Source Risk Limits will generally be based on emissions, operational parameters or production limits that serve to maintain risk below the Source Risk Limits.

(b) Source Risk Limits may be expressed in terms of risk, such as X per million for excess cancer risk or Hazard Index of Y, where X and Y indicate a numerical value.

(4) If the Toxic Air Contaminant Permit Attachment for an existing source contains a compliance schedule to reduce risk, the owner or operator must comply with all the requirements in the compliance schedule and maintain proposed risk below the Immediate Curtailment Level, if applicable.

(5) Determining Compliance with Source Risk Limits.

(a) Frequency. The owner or operator must determine compliance with the Source Risk Limit on the frequency specified in the Toxic Air Contaminant Permit Attachment as specified below:

(A) Cancer risk, using the emission rates of the toxic air contaminants emitted by the source that have cancer RBCs determined on a 12-rolling month basis. Compliance must be determined monthly, unless less frequent compliance determinations are specified in a source's Toxic Air Contaminant Permit Attachment;

(B) Chronic noncancer risk for each different chronic noncancer risk limit, using the emission rates of the toxic air contaminants emitted by the source that contribute to that chronic noncancer risk result determined on a 12-rolling month basis. Compliance must be determined monthly, unless less frequent compliance determinations are specified in a source's Toxic Air Contaminant Permit Attachment;

(C) Acute noncancer risk for each different acute noncancer risk limit, using the emission rates of the toxic air contaminants emitted by the source that contribute to that acute noncancer risk result determined for the preceding month. Compliance must be determined at least monthly, unless more frequent compliance determinations are specified in a source's Toxic Air Contaminant Permit Attachment;

(b) Compliance demonstration method.

(A) If the Source Risk Limit is based on emissions, production, or other limits on source operation, the owner or operator must monitor emissions, production, or other limits on source operation, using one or more of the following methods:

(i) Continuous emissions monitors;

(ii) Material balance calculations;

(iii) Emissions calculations using approved emission factors and process information;

(iv) Production or process limits monitoring; and

(v) Other methods approved by DEQ.

(B) If the Source Risk Limit is based on risk, the owner or operator must perform the Emissions Scaled Risk Estimate calculation as required under OAR 340-245-0320(3) or other emissions scaled risk estimate approved in writing by DEQ;

(6) If the owner or operator wishes to make a change that may increase risk above the Source Risk Limits in the Toxic Air Contaminant Permit Attachment, the owner or operator must comply with OAR 340-245-0070, if applicable; and OAR 340-245-0080.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0320

Calculations

(1) Directions for the Level 1 Risk Assessment Tool.

(a) When required under OAR 340-245-0080, an owner or operator must calculate a separate sum of risk ratios for each of the following categories: excess cancer risk, chronic noncancer

risk, and acute noncancer risk for the nearest residential, non-residential worker and non-residential child exposure locations.

(b) The owner or operator must use the following emission rates in this calculation:

(A) The actual toxic air contaminant emission rate, or the emission rate based on requested PTE or risk limits, as appropriate;

(B) For excess cancer risk and chronic noncancer risk, the annual emission rates; and

(C) For acute noncancer risk, the maximum 24-hour emission rates.

(c) The owner or operator must perform each of the following calculations in paragraphs (A), (B) and (C), except as allowed in paragraph (D):

(A) For cancer risk:

(i) For each TEU, use the stack height and distance to the nearest exposure locations to identify the appropriate dispersion factor under OAR 340-245-8060 Table 6A;

(ii) For each TEU and each toxic air contaminant emitted from the TEU, multiply the annual emission rate by the dispersion factor identified under subparagraph (i) to calculate an air concentration at the nearest exposure locations;

(iii) For each TEU and each toxic air contaminant emitted from the TEU, divide the air concentration of the toxic air contaminant calculated under subparagraph (ii) by the appropriate RBC of that toxic air contaminant under OAR 340-245-8050 Table 5 to calculate the risk from that toxic air contaminant at the nearest exposure locations;

(iv) For each TEU, add up the risk from each toxic air contaminant calculated under subparagraph (iii) to calculate the total excess cancer risk from that TEU at the nearest exposure locations; and

(v) For all TEUs, add up all of the risks calculated under subparagraph (iv) to obtain the total excess cancer risk in 1 million for the entire source.

(B) For chronic noncancer risk:

(i) For each TEU, use the stack height and distance to the nearest exposure locations to identify the appropriate dispersion factor under OAR 340-245-8060 Table 6A;

(ii) For each TEU and each toxic air contaminant emitted from the TEU, multiply the annual emission rate by the dispersion factor identified under subparagraph (i) to calculate an air concentration at the nearest exposure locations;

(iii) For each TEU and each toxic air contaminant emitted from the TEU, divide the air concentration of the toxic air contaminant calculated under subparagraph (ii) by the appropriate

RBC of that toxic air contaminant under OAR 340-245-8050 Table 5 to calculate the risk from that toxic air contaminant at the nearest exposure locations;

(iv) For each TEU, add up the risk from each toxic air contaminant calculated under subparagraph (iii) to calculate the total chronic noncancer risk from that TEU at the nearest exposure locations; and

(v) For all TEUs, add up all of the risks calculated under subparagraph (iv) to obtain the total chronic noncancer Hazard Index for the entire source. Hazard Indices may be calculated by noncancer target organ in consultation with DEQ.

(C) For acute noncancer risk:

(i) For each TEU, use the stack height and distance to the nearest exposure location to identify the appropriate dispersion factor under OAR 340-245-8060 Table 6B;

(ii) For each TEU and each toxic air contaminant emitted from the TEU, multiply the maximum 24-hour emission rate by the dispersion factor identified under subparagraph (i) to calculate an air concentration at the nearest exposure location;

(iii) For each TEU and each toxic air contaminant emitted from the TEU, divide the air concentration of the toxic air contaminant calculated under subparagraph (ii) by the acute RBC for that toxic air contaminant under OAR 340-245-8050 Table 5 to calculate the risk from that toxic air contaminant at the nearest exposure location;

(iv) For each TEU, add up the risk from each toxic air contaminant calculated under subparagraph (iii) to calculate the total acute noncancer risk from that TEU at the nearest exposure location; and

(v) For all TEUs, add up all of the risks calculated under subparagraph (iv) to obtain the total acute noncancer Hazard Index for the entire source. Hazard Indices may be calculated by noncancer target organ in consultation with DEQ.

(D) Instead of using stack height and distance to the nearest exposure location to obtain the appropriate dispersion factor under OAR 340-245-8060 Table 6A or 6B, the owner or operator may instead use, as a default, the most conservative dispersion factor, assuming a stack height of 5 meters and an exposure location of 50 meters, which is listed in the upper-left corner of each table. Using these default dispersion factors will result in conservatively high estimates of risk. If the risks calculated using these default dispersion factors are less than or equal to the applicable Source Risk Action Levels, the owner or operator may choose to use the risks calculated in this manner to show compliance with the Source Risk Action Levels.

(2) Sum of Risk Ratios calculation procedure for Level 2, 3 and 4 Source Risk Assessments.

(a) When required under OAR 340-245-0080, an owner or operator must calculate a separate sum of risk ratio for each of the following risk categories: excess cancer risk, chronic noncancer risk, and acute noncancer risk for the nearest residential, non-residential worker and non-residential child exposure locations;

(b) When making this calculation, the owner or operator must use concentrations for each toxic air contaminant at the nearest exposure locations, as follows:

(A) For excess cancer risk and chronic noncancer risk, the annual average concentrations must be used; and

(B) For acute noncancer risk, the maximum 24-hour average concentrations must be used.

(c) The owner or operator must perform the following calculations for each of the risk categories listed in subsection (a) and using the concentrations in subsection (b):

(A) For each TEU, divide the modeled concentration of each toxic air contaminant at the maximum exposure locations of interest by each of the appropriate RBCs of that toxic air contaminant in OAR 340-245-8050 Table 5, ensuring that the concentration is expressed in micrograms per cubic meter;

(B) For each TEU, add up the ratios calculated under paragraph (A) for each toxic air contaminant; and

(C) For an entire source, add up the ratios calculated under paragraph (B) to obtain the source's total excess cancer risk in one million or Hazard Index, whichever is applicable. Hazard Indices may be calculated by noncancer target organ in consultation with DEQ.

(3) Emissions Scaled Risk Estimate. When a source is required to calculate the Emissions Scaled Risk Estimate by another rule, the calculation must be performed as follows:

(a) The Emissions Scaled Risk Estimate = $(E_{new}/E_{prev}) \times RA_{prev}$, where:

(b) E_{new} = the sum over all toxic air contaminants emitted of {(emission rate to be analyzed of toxic air contaminant j, pounds per year)/(RBC of toxic air contaminant j)};

(c) "Emission rate to be analyzed" includes but is not limited to the emission rate for the most recent month, the most recent 12-rolling month period, or the projected daily, monthly or annual emission rate that will occur after construction of a new or modified TEU. This includes any new emissions since the most recent risk assessment, and excludes any emissions that have been eliminated since the most recent risk assessment.

(d) E_{prev} = the sum over all toxic air contaminants emitted of {(emission rate of toxic air contaminant i used in the most recent risk assessment, pounds per year)/(RBC of toxic air contaminant i)};

(e) RA_{prev} = the applicable risk value determined during the most recent risk assessment.

(4) Significant figures and rounding. When a source risk is calculated for comparison to a Risk Action Level and Source Permit Level:

(a) The final risk calculation must be rounded off as follows:

(A) For comparison to De Minimis Levels, round off to one decimal place; and

(B) For comparison to Risk Action Levels, round off to a whole number; and

(b) Round up if the last figure to be rounded off is 5 or greater, otherwise round down.

(5) Non-detect source test results. Owners and operators of sources must use the DEQ Source Sampling Manual (see OAR 340-200-0035) reference test methods for measuring toxic air contaminant and must use the criteria listed in the DEQ Source Sampling Manual to determine how to analyze non-detect data from source tests conducted in accordance with OAR 340 division 212.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0330

TBACT and TLAER Determinations

(1) If required to install TBACT or TLAER on any significant TEU, the owner or operator of a source must perform a TBACT or TLAER determination.

(a) The owner or operator must perform the TBACT determination and analysis by conducting a case-by-case TBACT determination under section (3), except as provided in section (2).

(b) The owner or operator must perform the TLAER determination and analysis by conducting a case-by-case TLAER determination under section (3).

(c) The owner or operator must submit a TBACT or TLAER determination to DEQ for approval, and the owner or operator must pay the case-by-case TBACT or TLAER determination fee, as applicable, specified in OAR 340-216-8030 Table 3; and

(d) A TEU is determined to have TBACT if DEQ approves the TBACT determination for the TEU and the owner or operator has implemented all operational or source modifications required to meet TBACT, or will implement them on an enforceable schedule included in its Toxic Air Contaminant Permit Attachment.

(e) A TEU is determined to have TLAER if DEQ approves the TLAER determination for the TEU and the owner or operator has implemented all operational or source modifications required to meet TLAER upon beginning operation of the new or reconstructed source.

(2) Presumptive TBACT.

For an existing TEU, compliance with emission control requirements, work practices or limitations established by a major source National Emissions Standard for Hazardous Air Pollutants adopted by the EPA after 1993 is deemed to be TBACT, provided that:

(a) The emission control requirements, work practices or limitations result in an actual reduction to the emissions of the hazardous air pollutants regulated under the National Emissions Standard for Hazardous Air Pollutants; and

(b) There are no other toxic air contaminants emitted by the source that:

(A) Are not controlled by the emission control requirements, work practices or limitations established by a major source National Emissions Standard for Hazardous Air Pollutants; and

(B) Materially contribute to public health risks. Toxic air contaminants emitted by a source that are not controlled by a National Emissions Standard for Hazardous Air Pollutants and that would cause a cancer risk greater than 25 in 1 million or a hazard index of 1 is considered a material contribution.

(C) The requirement reduces the emissions of the Toxic Air Contaminants of concern to the same or a similar degree as the requirement reduces the emissions it is intended to reduce. For the purpose of this paragraph, a requirement that reduces emissions of Toxic Air Contaminants in one pollutant category (for example, particulate matter), but has little or no effect on emissions in another pollutant category (for example, volatile organic compounds), may meet TBACT for Toxic Air Contaminants in the first pollutant category but does not meet TBACT for pollutants in the other pollutant category.

(c) TEUs that are subject to and comply with OAR 340-244-9000 through 340-244-9090, Colored Art Glass Manufacturing rules, or OAR 340-245-9000 through 340-245-9080, Colored Art Glass Manufacturing rules, meet TBACT and a case-by-case determination is not required for such TEUs.

(3) Case-by-Case TBACT determination. The owner or operator of the TEU must submit a proposed case-by-case TBACT determination to DEQ for review and approval. DEQ must review a case-by-case TBACT determination using the “Top Down” approach described in this section.

(a) TBACT takes into consideration:

(A) What has been achieved in practice for:

(i) Sources in the same class as the source to which the toxic air contaminant emissions limitation or control measure will apply, as classified under ORS 468A.050; or

(ii) Processes or emissions similar to the processes or emissions of the source;

(B) Energy and health or environmental impacts not related to air quality; and

(C) Economic impacts and cost-effectiveness, including the costs of changing existing processes or equipment or adding equipment or controls to existing processes and equipment.

(b) Toxics best available control technology may be based on a design standard, equipment standard, work practice standard or other operational standard, or a combination thereof.

(c) The owner or operator of the TEU must first identify a comprehensive list of air pollution reduction measures, including emission controls and pollution prevention measures that may be applied to the TEU, and must list the reduction measures in descending order of air pollution reduction effectiveness, irrespective of technical feasibility, other environmental impacts or cost.

(d) The owner or operator must then start with the most effective reduction measure identified at the top of the list created under subsection (a), and must select that reduction measure unless the owner or operator demonstrates that it should be eliminated for one or more of the following reasons:

(A) Technical infeasibility. The justification must show that physical, chemical, or engineering principles, or technical difficulties would prevent the successful application of the reduction measure;

(B) Environmental impacts. The justification must show that the adverse environmental effects of the most effective reduction measure (i.e., effects on water or land, toxic air contaminant emissions, or increased environmental hazards), when compared with its toxic air contaminant emission reduction benefits, would make use of the most effective reduction measure unreasonable;

(C) Unreasonable cost. The justification must show that the total and incremental costs of the reduction measure to be eliminated from consideration on a cost per mass of toxic air contaminant reduced basis, would be unreasonable. The demonstration must comply with the following requirements:

(i) The cost of the reduction measure must be estimated in a manner consistent with that used in the EPA Air Pollution Control Cost Manual, Sixth Edition, EPA/452/B-02-001, January 2002, or a comparable analysis approved by DEQ;

(ii) If a TEU exists at the time of the TBACT determination, the cost of the reduction measure may include the costs to retrofit the reduction measure to the TEU or to replace or upgrade an existing reduction measure if the TEU is so equipped, such as but not limited to costs to remove, dispose of or revise existing equipment, foundations or structural supports, to customize equipment to fit in the available space, or to overcome limited accessibility; and

(iii) In assessing the cost-effectiveness of any measure for purposes of determining TBACT for a source, DEQ must assess only the economic impacts and benefits associated with controlling toxic air contaminants.

(D) Energy impacts. The justification must show that:

(i) The most effective reduction measure uses fuels that are not reliably available; or

(ii) The energy consumed by the most effective reduction measure is greater than the proposed measure(s), and that the extra energy used, when compared with the toxic air contaminant emission reduction benefits resulting from the most effective reduction measure, would make use of the most effective measure unreasonable.

(e) If the most effective reduction measure is eliminated from consideration, the applicant should move down the list created under subsection (a) to evaluate each successive reduction measure on the list, using the procedures described under subsection (b), until a reduction measure is reached that is not eliminated. This measure would constitute the case-by-case TBACT, as appropriate, for the TEU. If all measures are eliminated and DEQ agrees with this determination, then the TEU is determined to have TBACT, as appropriate, with no changes to the TEU required.

(4) Case-by-Case TLAER determination. The owner or operator of the TEU must submit a proposed case-by-case TLAER determination to DEQ for review and approval. DEQ must review a case-by-case TLAER determination using the “Top Down” approach described in section (3). Unreasonable cost in paragraph (C) is not part of a TLAER determination.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0335

Pollution Prevention

(1) Sources whose risk is greater than or equal to the TBACT Level before any additional risk reduction measures are included to further reduce risk are required to do an analysis of pollution prevention measures.

(2) The owner or operator of the source must evaluate pollution prevention measures that may reduce or eliminate emissions of toxic air contaminants. If the owner or operator chooses to implement any such measures, the owner or operator must include that information in the Toxic Air Contaminant Permit Attachment Application.

(3) An analysis of pollution prevention measures must include the following:

(a) A detailed review of source and process level data related to the toxic air contaminants of concern including:

(A) A process flow diagram with all the steps through which material inputs pass to form a product and the point at which toxics enter the system and leave the production unit, with identification of the inputs and outputs relevant to generation of toxic air contaminants; and

(B) Materials accounting which quantifies the total chemical inputs and outputs of a particular toxic air contaminant in a process, and ultimately, source-wide usage;

(b) The identification of pollution prevention options that includes measures focused on the toxic air contaminants, by-products (outputs not in products) and processes that have been mapped and quantified. The categories of toxic air contaminant pollution prevention options include the following:

(A) Chemical input alternatives evaluated for hazard characteristics, technical performance, cost and availability, and exposure;

(B) Product reformulation;

(C) Production process redesign or modification;

(D) Production process modernization;

(E) Improved operations and maintenance;

(F) In-process recycling; and

(G) Inventory management controls;

(c) The technical screening and feasibility evaluation of toxic air contaminant pollution prevention options include the following:

(A) Performance needs for the application, process or product that contains the toxic air contaminant for which the pollution prevention option is being sought;

(B) Identification of the option as favorable with respect to performance by other industries;

(C) Availability as “off-the-shelf” technology with demonstrated successful use;

(D) Compatibility of the option with existing process technology;

(E) Effects on product quality and compliance with customer specifications; and

(F) Long term viability of the option; and

(d) The economic feasibility evaluation of toxic air contaminant pollution prevention options to determine all of the costs and savings associated with implementing the option, include the following:

(A) Direct costs or savings (e.g., capital investment, operations and maintenance, annual chemical costs vs. per unit cost);

(B) Indirect costs or savings (e.g., reduced worker health and safety costs, compliance cost reductions, and lower waste and by-product management costs);

(C) Effects on future liability (e.g., liability insurance premium reductions);

(D) Non-monetized costs or benefits (e.g., improved company public image and community relations); and

(E) New revenue sources associated with this option (e.g., will there be new markets for modified products).

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040,
468A.050, 468A.070, and 468A.155

340-245-0340

Emissions Inventory and Modeling Information

(1) Individual emissions inventory. For the purpose of DEQ evaluating risk, DEQ may require the owner or operator of any permitted or unpermitted source to submit an emissions inventory of all toxic air contaminants listed in OAR 340-245-8020 Table 2, upon written request. The owner or operator must submit the emissions inventory within 30 days of its receipt of the written request, unless DEQ allows additional time under section (3).

(2) Periodic state-wide emissions inventory. Not more frequently than once every three years, DEQ may require the owners and operators of all permitted and unpermitted sources that have previously submitted emissions inventories under section (1) to submit an updated toxic air contaminant emissions inventory. The reporting year will correspond with EPA's National Air Toxics Assessment reporting year (2020, 2023, 2026, etc.).

(a) If DEQ requires such updated inventories, DEQ must notify owners or operators of sources in writing; and

(b) The owner or operator of each source must submit its updated emissions inventory electronically to DEQ with their annual report required by the Toxic Air Contaminant Permit Attachment, unless additional time is allowed under section (3).

(3) The owner or operator may request, and DEQ may grant, up to an additional 60 days to submit the toxic air contaminant emissions inventory if the owner or operator can demonstrate to DEQ's satisfaction that additional time is needed to complete the inventory.

(4) Emissions inventory requirements.

(a) All sources must submit:

(A) A list of emission units or TEUs and activities that emit toxic air contaminants. The list of emission units, TEUs or activities that emit toxic air contaminants should not be limited to what is listed in a source's operating permit but should include all potential sources of toxic air contaminant emissions;

(B) A list of production, fuel and material usage rates for each emissions unit, TEU and activity for the following:

(i) The calendar year preceding the year DEQ's written request is made;

(ii) The projected maximum year. Use the projected maximum annual production and process rates that are used to calculate the Source Risk Limit or Plant Site Emissions Limits, whichever is less; and

(iii) The projected maximum day. Use knowledge of process to estimate the maximum daily production and process rates.

(C) Provide material balance information using Safety Data Sheets (formerly Material Safety Data Sheets) and/or Technical Data Sheets for solvent or coating materials used in any process; and

(D) Operating schedule (hours/day, days/year, seasonal variability) for the source and/or emission units, TEUs and activities.

(b) Sources with Title V, Standard and Simple Air Contaminant Discharge Permits, and unpermitted sources when DEQ so requires, must also submit:

(A) A list of all toxic air contaminants emitted by the source;

(B) A list of all TEUs, and of all emissions units if TEUs are defined differently than emissions units;

(C) A list of any exempt TEUs;

(D) The amount of each toxic air contaminant emitted from each emission unit, TEU and activity, with the emission factors used or material balance information, as appropriate, for the following:

(i) The calendar year preceding the year DEQ's written request is made; and

(ii) The projected maximum year. Use the projected maximum annual production and process rates that are used to calculate the Source Risk Limit or the Plant Site Emissions Limits, whichever is less, and include startup and shutdown emissions;

(iii) The projected maximum day. Use knowledge of process to estimate the maximum daily emissions, and include startup and shutdown emissions.

(E) Emissions must be reported as mass emitted per 24 hours for each toxic air contaminant that has an acute RBC, and as mass emitted per year for each toxic air contaminant that has an annual RBC or has no RBC; and

(F) The name of each resource used to obtain toxic air contaminant emission factors or methodologies used to estimate emissions (e.g., AP-42 or WebFIRE, California Air Toxic Emission Factors, etc.).

(5) Approval of toxic air contaminant emissions inventory reports.

(a) Within 180 days of receipt of the toxic air contaminant emissions inventory report, DEQ must confirm receipt in writing and conduct an initial review of the source's toxic air contaminant emissions inventory report.

(b) DEQ must either approve the air toxics emissions inventory report and provide the owner or operator with written approval or reject the air toxics emissions inventory report and provide the owner or operator with a written notice of deficiency. DEQ's approval or rejection will be based on whether:

(A) The toxic air contaminant emissions inventory report was prepared consistent with section (4); and

(B) The information provided was complete and accurate.

(c) Within 60 days of the date of notification by DEQ of toxic air contaminant emissions inventory report notice of deficiency, an owner or operator must revise and resubmit a toxic air contaminant emissions Inventory Report that corrects all identified deficiencies. DEQ must provide the owner or operator with written notice that it either:

(A) Approves the revised and resubmitted toxic air contaminant emissions inventory report; or

(B) Modifies the toxic air contaminant emissions inventory report as DEQ deems appropriate and approves it as modified.

(6) Modeling information. For the purpose of any risk assessment undertaken by DEQ, DEQ may require the owner or operator of any permitted or unpermitted source to submit the following information upon written request. The owner or operator must submit the requested information within 30 days of receipt of the request, unless DEQ allows additional time under section (3):

(a) A site map of the area where the source is located, with map scale, such that the area surrounding the source is shown for a distance of at least 5 kilometers from the source's nearest property boundary. The map must show the source location and property boundary and all of the following within a distance of 2 kilometers from the source's nearest property boundary: residential areas, schools, daycare centers, hospitals, nursing homes, and long-term care facilities;

(b) A plot plan of the source showing the locations of the following:

(A) The source's property boundary and locations of all buildings; and

(B) All emissions points and areas where fugitive emissions occur;

(c) The following physical information:

(A) For each emissions point, including points or areas where fugitive emissions are released, to the extent that the source can obtain the information without conducting emissions measurements:

- (i) Latitude and longitude or Universal Transverse Mercator (UTM) coordinates;
 - (ii) Height of the release point or area above ground level;
 - (iii) Cross-sectional dimensions and shape of the release point or area, such as stack diameter, area of fugitive emissions, and horizontal and vertical dimensions of volume sources;
 - (iv) The direction in which emissions are released, and any obstructions that may affect the release point such as, but not limited to, rain caps, roof overhangs and building openings;
 - (v) Temperature of the emissions at the release point and whether the value is measured or estimated; and
 - (vi) Volumetric flow rate of the emissions at the release point and whether the value is measured or estimated.
- (B) Building dimensions for structures that may influence downwash of emissions, including horizontal dimensions and heights above ground level to roof, terraces, and parapets; and
- (d) Emissions data for all emission points from the source or modification. This data must represent the actual Toxic Air Contaminant emission rate or the requested limit on PTE for the annual and 24-hour averaging times.
- (7) Recordkeeping. The owner or operator of a source that provides DEQ with an emissions inventory under this rule must retain a record of the toxic air contaminant emissions inventory for five years from the date the inventory is submitted to DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0400

Toxicity Reference Value Hierarchy

- (1) This rule lists hierarchies of preference for toxicity information from governmental agencies that OHA and DEQ consider authoritative in terms of their scientific rigor and methods.
- (a) OHA and DEQ must recommend adoption and use of toxicity reference values from the toxicity information published by the authoritative bodies listed in sections (2) and (3). Toxicity reference values will be recommended from the most preferred authoritative body that published a value for the toxic air contaminant in question upon DEQ's confirmation, in consultation with OHA, that such decision is supported by peer-reviewed science and is current.
 - (b) The toxicity reference values are used to develop RBCs; and
 - (c) DEQ may consult with OHA in the recommendation of toxicity reference values and development of RBCs.

(2) Chronic toxicity reference values.

(a) The authoritative bodies listed below that publish toxicity reference values are in order of preference for chronic toxicity reference values used to develop chronic RBCs with averaging times of one year or longer:

(A) DEQ alone or in consultation with OHA or the Air Toxics Science Advisory Committee, including, for example, Ambient Benchmark Concentrations;

(B) EPA, Integrated Risk Information System (IRIS) Reference Concentrations (RfC) and Inhalation Unit Risk (IUR);

(C) EPA, Office of Superfund Remediation and Technology Innovation (OSRTI) provisional peer reviewed toxicity value (PPRTV) program (Reference Concentrations (RfCs) and Inhalation Unit Risks (IURs));

(D) United States Agency for Toxic Substances and Disease Registry (ATSDR), chronic inhalation Minimal Risk Level (MRL); and

(E) California's Office of Environmental Health Hazard Assessment (OEHHA), chronic Reference Exposure Level (REL) and Inhalation Unit Risk (IUR).

(b) To the extent possible, DEQ must generate a toxicity reference value for both cancer and noncancer health effects for each toxic air contaminant. Therefore, DEQ must follow the hierarchy in subsection (a) for cancer and noncancer toxicity reference values separately. DEQ must calculate toxicity reference values using 1 in 1 million as the target excess cancer risk level or a hazard quotient of 1 for noncancer toxicity reference values.

(3) Acute toxicity reference values.

(a) The authoritative bodies listed below that publish toxicity reference values are in order of preference for acute toxicity reference values used to develop acute RBCs with a 24-hour averaging time:

(A) DEQ, alone or in consultation with OHA or the Air Toxics Science Advisory Committee;

(B) United States Agency for Toxic Substances and Disease Registry (ATSDR), acute inhalation Minimal Risk Levels (MRLs);

(C) California's Office of Environmental Health Hazard Assessment (OEHHA), acute Reference Exposure Level (REL); and

(D) United States Agency for Toxic Substances and Disease Registry (ATSDR), intermediate inhalation Minimal Risk Levels (MRLs).

(b) If no acute toxicity reference values are available from authoritative bodies listed in subsection (a), no acute RBC will be recommended or proposed.

(c) If the acute toxicity reference value derived under this section is lower than the chronic noncancer toxicity reference value derived under section (2), the chronic noncancer toxicity reference value will be used for the acute toxicity reference value.

(4) While DEQ is in the first position in the hierarchy under paragraph (2)(a) and (3)(a), DEQ must not consider sources of toxicity information for a toxic air contaminant outside of the authoritative bodies listed in (2)(a)(B-E) or (3)(a)(B-D) unless none of those authoritative bodies have published toxicity information from which a toxicity reference value can be derived.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0410

Calculation of Toxicity Reference Values and Risk-Based Concentrations

(1) Toxicity Reference Values

(a) Cancer toxicity reference values (TRVs) based on a chemical-specific inhalation unit risk (IUR) factor will be calculated using the following equation:

$$TRV_{Cancer} = \frac{Target\ Risk}{IUR}$$

Where:

Target Risk = 1 in 1 million excess cancer risk

IUR = Inhalation Unit Risk (($\mu\text{g}/\text{m}^3$)⁻¹) from the authoritative bodies listed in OAR 340-245-0400(2).

Cancer TRVs are shown in OAR 340-245-8030 Table 3.

(b) Noncancer toxicity reference value TRVs will be based directly on chemical-specific reference concentrations:

$$TRV_{nc} = RfC_{nc}$$

$$TRV_a = RfC_a$$

Where:

TRV_{nc} = Toxicity reference value, noncancer, chronic ($\mu\text{g}/\text{m}^3$)

TRV_a = Toxicity reference value, noncancer, acute ($\mu\text{g}/\text{m}^3$)

RfC_{nc} = Reference Concentration, chronic ($\mu\text{g}/\text{m}^3$) from the authoritative bodies listed in OAR 340-245-0400(2), upon recommendation by DEQ, in consultation with OHA.

RfC_a = Reference Concentration, acute ($\mu\text{g}/\text{m}^3$) from the authoritative bodies listed in OAR 340-245-0400(2) or (3), upon recommendation by DEQ, in consultation with OHA.

Chronic and acute noncancer TRVs are provided in OAR 340-245-8030 Table 3.

(2) Risk-based Concentrations

(a) Residential RBCs.

(A) Residential RBCs are calculated based on TRVs. Two modifications of the TRV are required, if appropriate. If a toxic air contaminant is identified by DEQ to require consideration of exposure pathways other than inhalation, a multipathway adjustment factor is used. If a chemical is identified by EPA as a carcinogen acting by a mutagenic mode of action, and therefore having greater toxicity during early-life stages, an early-life adjustment factor is used.

$$residRBCc = \frac{TRVc}{ELAFr * MPAFrc}$$

$$residRBCnc = \frac{TRVnc}{MPAFrnc}$$

Where:

$residRBCc$ = Residential risk-based concentration for cancer effects ($\mu\text{g}/\text{m}^3$)

$residRBCnc$ = Residential risk-based concentration for noncancer effects ($\mu\text{g}/\text{m}^3$)

$TRVc$ = Toxicity reference value for cancer effects ($\mu\text{g}/\text{m}^3$)

$TRVnc$ = Toxicity reference value for noncancer effects ($\mu\text{g}/\text{m}^3$)

$ELAFr$ = Early-life adjustment factor, resident child (chemical specific, unitless)

$MPAFrc$ = multipathway adjustment factor, resident cancer (chemical specific, unitless)

$MPAFrnc$ = multipathway adjustment factor, resident noncancer (chemical specific, unitless)

(B) If multipathway or early-life considerations are not relevant for a toxic air contaminant, MPAF and ELAF adjustments are not included in the calculation of RBCs. The adjustment factors DEQ must use to calculate RBCs are shown in OAR 340-245-8040 Table 4.

(b) Non-residential chronic RBCs.

(A) Non-residential chronic RBCs will be calculated based on TRVs. Because chronic TRVs are based on continual exposure, adjustments for exposure time, frequency, and duration will be applied for non-residential exposure. Two additional modifications of the TRV will be required, if appropriate. If a toxic air contaminant is identified by DEQ to require consideration of exposure pathways other than inhalation, a multipathway adjustment factor will be used. If a toxic air contaminant is identified by EPA as a carcinogen acting by a mutagenic mode of action, and therefore having greater toxicity during early-life stages, an early-life adjustment factor will be used.

$$nrchildRBCc = \frac{TRVc * childNRAFc}{ELAFnr * MPAFnrc}$$

$$nrchildRBCnc = \frac{TRVnc * childNRAFnc}{MPAFnrnc}$$

$$workerRBCc = \frac{TRVc * workerNRAFc}{MPAFnrc}$$

$$workerRBCnc = \frac{TRVnc * workerNRAFnc}{MPAFnrnc}$$

Where:

nrchildRBCc = Nonresidential child risk-based concentration for cancer effects ($\mu\text{g}/\text{m}^3$)

nrchildRBCnc = Nonresidential child risk-based concentration for noncancer effects ($\mu\text{g}/\text{m}^3$)

workerRBCc = Nonresidential worker risk-based concentration for cancer effects ($\mu\text{g}/\text{m}^3$)

workerRBCnc = Nonresidential worker risk-based concentration for noncancer effects ($\mu\text{g}/\text{m}^3$)

TRVc = Toxicity reference value for cancer effects ($\mu\text{g}/\text{m}^3$)

TRVnc = Toxicity reference value for noncancer effects ($\mu\text{g}/\text{m}^3$)

ELAFnr = Early-life adjustment factor, nonresident child (chemical specific, unitless)

MPAFnrc = multipathway adjustment factor, nonresident cancer (chemical specific, unitless)

MPAFnrnc = multipathway adjustment factor, nonresident noncancer (chemical specific, unitless)

childNRAFc = Nonresident adjustment factor, child cancer (unitless)

childNRAFnc = Nonresident adjustment factor, child noncancer (unitless)

workerNRAFc = Nonresident adjustment factor, worker cancer (unitless)

workerNRAFnc = Nonresident adjustment factor, worker noncancer (unitless)

(B) If multipathway or early-life considerations are not relevant for chemical toxic air contaminant, MPAF and ELAF adjustments are not included in the calculation of RBCs. The adjustment factors DEQ must use to calculate RBCs are shown in OAR 340-245-8040 Table 4.

(c) Acute RBCs. The acute TRV will be used directly as the acute RBC.

$$acuteRBC = TRVa$$

Where:

acuteRBC = Acute risk-based concentration ($\mu\text{g}/\text{m}^3$)

TRVa = Toxicity reference value for acute effects ($\mu\text{g}/\text{m}^3$)

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155

Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0420

Process for Updating Lists of Regulated Toxic Air Contaminant and Their Risk-Based Concentrations

(1) Purpose

(a) As industrial practices and toxicological sciences advance, it is important to have rules for Cleaner Air Oregon that allow for air quality regulation to continue to reflect the latest practices and science. The list of toxic air contaminants that are regulated and their RBCs represent one area where regulations will need regular updating to accommodate advancing science and practices.

(b) These rules include two lists of toxic air contaminants; OAR 340-245-8020 Table 2 contains toxic air contaminants that are for emissions reporting only, and OAR 340-245-8050 Table 5 contains toxic air contaminants for which RBCs are readily available for regulation as part of air permitting. The purpose of OAR 340-245-8020 Table 2 is to inform prioritization of RBC development and maintain a current and broad understanding of statewide toxic air contaminant emissions as industries and industrial practices change over time. The purpose of OAR 340-245-8050 Table 5 is to ensure that impacts to public health from industrial air emissions are minimized.

(2) OAR 340-245-8020 Table 2, Toxic Air Contaminant Reporting List

(a) The Toxic Air Contaminant Reporting List is comprised of California Air Resources Board's Toxic Air Contaminant Identification List Appendix A-1, Washington's Table of ASIL, SQER and de minimis emission values, Oregon's Toxics Focus list, and EPA's Hazardous Air Pollutants list.

(b) Every three years starting from the effective date of this rule, DEQ, in consultation with OHA, must review the four lists in subsection (a) for changes and propose to update the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 to capture changes in any of those four lists over the intervening three years.

(c) During the reviews of the Toxic Air Contaminant Reporting List, DEQ may also propose to add or remove toxic air contaminants based on information gathered from past reporting, industry types in Oregon that are not in California or Washington, or OHA's and DEQ's knowledge of toxic air contaminants that may be of potential public health concern in Oregon.

(d) DEQ must propose updates to OAR 340-245-8020 Table 2 through 340-245-8060 Table 6, as applicable, through the rulemaking process.

(e) Owners or operators of sources must report emissions of any newly listed toxic air contaminant during the next periodic state-wide emissions inventory required in OAR 340-245-0340 following the new listing or earlier upon request by DEQ.

(3) OAR 340-245-8030 Table 3, Toxicity Reference Values and OAR 340-245-8050 Table 5, Risk-Based Concentrations.

(a) The list of Risk-Based Concentrations is comprised of all toxic air contaminants from the Toxic Air Contaminants Reporting List for which OHA and DEQ were able to find or set RBCs.

(b) Every three years starting from the effective date of this rule, or as necessary, DEQ, in consultation with OHA, must review the toxic air contaminants and toxicity reference values published by the authoritative bodies listed in OAR 340-245-0400 for changes over the intervening three years. DEQ may propose to:

(A) Add toxic air contaminants to OAR 340-245-8030 Table 3 through 340-245-8060 Table 6, as applicable, if toxicity reference values have been generated by authoritative bodies listed in OAR 340-245-0400 for toxic air contaminants on the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 from which RBCs can be set;

(B) Remove toxic air contaminants from OAR 340-245-8030 Table 3 through 340-245-8060 Table 6, as applicable, if all authoritative bodies listed in OAR 340-245-0400 have rescinded toxicity reference values for that toxic air contaminant without providing a replacement; or

(C) Revise toxicity reference values listed in OAR 340-245-8030 Table 3 and risk based concentrations in OAR 340-245-8050 Table 5, as necessary, if an authoritative body listed in OAR 340-245-0400 has revised toxicity reference values for that toxic air contaminant.

(c) DEQ must propose updates to OAR 340-245-8030 Table 3 through 340-245-8060 Table through 6, as applicable, through the rulemaking process. (4) DEQ must use the RBCs in OAR 340-245-8050 Table 5 in Source Risk Assessments for setting any necessary permit limits to limit cancer or noncancer risk.

(a) DEQ must review RBCs by following the same process that was used to establish the initial list using the hierarchy of authoritative bodies in OAR 340-245-0400 and will include in its review any updates by authoritative bodies in the intervening 3 years since the last review; and

(b) DEQ must propose updates to RBCs through the rulemaking process.

(5) Petitions to update the lists of regulated toxic air contaminants to add or remove toxic air contaminants from OAR 340-245-8020 Table 2 or revise an RBC in OAR 340-245-8050 Table 5 outside of or by different preference than the hierarchy listed in OAR 340-245-0400.

(a) Any person may request to update an RBC in OAR 340-245-8050 Table 5 by following these procedures:

(A) The request must be made in writing to DEQ;

(B) The request must be received by DEQ more than 18 months before the applicable triennial review described in section (2) or (3); and

(C) To be considered, the submission must include either:

(i) Inhalation toxicity reference values established by a federal agency or by another state; or

(ii) Publicly available and peer-reviewed toxicity information for the toxic air contaminant that demonstrates a quantitative dose-response relationship in human or animal studies from which RBCs could be calculated.

(D) If the request applies to a toxic air contaminant for which toxicity information is available from one or more of the authoritative bodies listed in OAR 340-245-0400(2) or OAR 340-245-0400(3), then only petitions to select a toxicity reference value from one of those authoritative bodies will be considered.

(E) If a toxic air contaminant being requested for review has no available toxicity information as described in paragraph (C) and is emitted at a rate of at least 1 pound per year in the state of Oregon, then DEQ must put the toxic air contaminant on a formal “Wait List”, to be held there until toxicity information for that toxic air contaminant becomes available.

(b) To be considered for addition to the Toxic Air Contaminant Reporting List in OAR 340-0245-8020 Table 2, the petitioner must provide evidence that:

(A) The chemical is emitted in the state of Oregon at a rate of at least 1 pound per year; and

(B) The chemical is toxic.

(c) Any person may request to remove a toxic air contaminant from the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 or the RBC list in OAR 340-245-8050 Table 5 by following these procedures:

(A) The request must be made in writing to DEQ;

(B) The request must be received by DEQ more than 18 months before the applicable triennial review described in section (2) or (3); and

(C) To be considered, the submission must demonstrate all authoritative bodies listed in OAR 340-245-0400 have rescinded toxicity reference values for that toxic air contaminant without providing a replacement.

(d) If DEQ receives a request to update an RBC or add or remove a toxic air contaminant from the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 or the RBC list in OAR 340-245-8050 Table 5 and the request is received less than 18 months before the applicable triennial review described in section (2) or (3), the request will be reviewed during the triennial review in subsection (3)(b).

(e) If DEQ, after consultation with OHA, determines that updates are warranted as a result of a petition, DEQ must propose updates to RBCs or additions or removals of toxic air contaminants to the Toxic Air Contaminant Reporting List in OAR 340-245-8020 Table 2 or the RBC list in OAR 340-245-8050 Table 5 through the rulemaking process.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

340-245-0500

Cleaner Air Oregon Fees

(1) Any owner or operator required to obtain an Oregon Title V Operating Permit under OAR 340 division 218 must submit the annual CAO base fee as specified in OAR 340-220-0050(4) to DEQ.

(2) Any owner or operator required to obtain a Basic, General, Simple or Standard Air Contaminant Discharge Permit under OAR 340 division 216 must submit the annual CAO base fee to DEQ as specified in OAR 340-216-8020 Table 2 Part 2.

(3) Any owner or operator required to obtain a Toxic Air Contaminant Permit Attachment must also submit the Toxic Air Contaminant Permit Attachment fees specified in OAR 340-216-8030 Table 3 to DEQ.

Stat. Auth.: ORS 468.020, 468.065, 468A.025, 468A.040, 468A.050, 468A.070, 468A.155
Stats. Implemented: ORS 468.065, 468A.010, 468A.015, 468A.025, 468A.035, 468A.040, 468A.050, 468A.070, and 468A.155

Revised Colored Art Glass Manufacturing Facility Rules [NOTE: These are new rules based on OAR 340-244-9000 through 340-244-9090. Rules OAR 340-244-9000 through 340-244-9090 have been copied here and amended, except that OAR 340-244-9040 and 340-244-9090 have been omitted. Although these are new rules, they are shown in redline/strikeout to show the differences from the original rules in OAR 340-244-9000 through 9090.]

[NOTE: Application of these rules is subject to OAR 340-244-8990.]

340-245-9000

Colored Art Glass Manufacturing Facility Rules; Applicability and Jurisdiction

Notwithstanding OAR 340 division 246, OAR 340-245-9000 through 340-245-9080 apply to all facilities in the state of Oregon that:

(1) Manufacture glass from raw materials, or a combination of raw materials and cullet, for:

(a) Use in art, architecture, interior design and other similar decorative applications, or

(b) Use by glass manufacturers for use in art, architecture, interior design and other similar decorative applications; and

(2) Manufacture 5 tons per year or more of glass using raw materials that contain glassmaking HAPs.

(3) Subject to the requirements in this division and OAR 340-200-0010(3), LRAPA is designated by the EQC to implement OAR 340-245-9000 through 9095 within its area of jurisdiction.

NOTE: This rule was moved verbatim from OAR 340-244-9000 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9000

340-245-9010

Colored Art Glass Manufacturing Facility Rules; Definitions

The definitions in OAR 340-200-0020 and this rule apply to OAR 340-245-9000 through 9095. If the same term is defined in this rule and 340-200-0020, the definition in this rule applies to this division.

(1) “Colored Art Glass Manufacturer” or “CAGM” means a facility that meets the applicability requirements in OAR 340-245-9000 and refers to the owner or operator of such a facility when the context requires.

(2) “Chromium III” means chromium in the +3 oxidation state, also known as trivalent chromium.

(3) “Chromium VI” means chromium in the +6 oxidation state, also known as hexavalent chromium.

(4) “Chromium”, without a following roman numeral, means total chromium.

(5) “Controlled” means the glassmaking furnace emissions are treated by an emission control device approved by DEQ.

(6) “Cullet” means pieces of finished glass that, when mixed with raw materials and charged to a glassmaking furnace, is used to produce new glass. Cullet does not include frit as defined in subsection (9)(a). Cullet is not considered to be a raw material.

(7) “Emission control device” means control device as defined in OAR 340 Division 200.

(8) “Finished glass” means the final glass product that results from melting and refining materials in a glassmaking furnace. Finished glass that has been remelted without the addition of raw materials is still finished glass.

(9) “Frit” means both of the following:

(a) Granules of glassified or vitrified material that is not made from finished glass, and which contains a higher proportion of glassmaking HAP than would be found in a finished glass. The purpose of such material includes, but is not limited to, making powdered glassmaking HAPs safer to handle by combining them with silica or other oxides.

(b) Granules of crushed finished glass.

(10) “Glassmaking furnace” means a refractory-lined vessel in which raw materials are charged and melted at high temperature to produce molten glass.

(11) “Glassmaking HAP” means arsenic, cadmium, chromium, lead, manganese, nickel or selenium in any form, such as the pure chemical element, in compounds or mixed with other materials.

(12) “Raw material” means:

(a) Substances that are intentionally added to a glass manufacturing batch and melted in a glassmaking furnace to produce glass, including but not limited to:

(A) Minerals, such as silica sand, limestone, and dolomite;

(B) Inorganic chemical compounds, such as soda ash (sodium carbonate), salt cake (sodium sulfate), and potash (potassium carbonate);

(C) Oxides and other compounds of chemical elements, such as lead oxide, chromium oxide, and sodium antimonate; and

(D) Ores of chemical elements, such as chromite and pyrolusite.

(b) Glassmaking HAPs that are naturally-occurring trace constituents or contaminants of other substances are not considered to be raw materials.

(c) Raw material includes materials that contain glassmaking HAPs in amounts that materially affect the properties of the finished product, such as its color, texture or bubble content. Such materials may be powdered, frit, or in some other form. For the purpose of this definition, frit as described in subsection (9)(a) is a raw material, but frit as described in subsection (9)(b) is not a raw material.

(d) Cullet and material that is recovered from a glassmaking furnace control device for recycling into the glass formulation are not considered to be raw materials.

(13) “Tier 1 CAGM” means a CAGM that produces at least 5 tons per year, but less than 100 tons per year, of glass using raw materials that contain glassmaking HAPs in glassmaking furnaces that are only electrically heated.

(14) “Tier 2 CAGM” means:

(a) A CAGM that produces 5 tons per year or more of glass using raw materials that contain glassmaking HAPs in glassmaking furnaces, at least one of which is fuel-heated or combination fuel- and electrically-heated; or

(b) Produces 100 tons per year or more of glass using raw materials that contain glassmaking HAPs in any type of glassmaking furnace.

(15) “Uncontrolled” means the glassmaking furnace emissions are not treated by an emission control device approved by DEQ.

(16) “Week” means Sunday through Saturday.

NOTE: This rule was moved verbatim from OAR 340-244-9010 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040
Stats. Implemented: ORS 468A.025, & 468A.040
Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9010

340-245-9015

Colored Art Glass Manufacturing Facility Rules; Compliance Extensions

A Tier 1 CAGM may request, and DEQ may grant, one or more extensions, not to exceed a total of 12 months, to the compliance date for installation of emission control systems if the CAGM cannot meet the compliance date for reasons beyond its reasonable control. A Tier 1 CAGM that has been granted an extension:

- (1) Is allowed to operate without the emission control device required by OAR 340-224-9050 until the required emission control device is installed and operational, or the extension expires, whichever is earlier; and
- (2) Must comply with OAR 340-245-9020 and 340-245-9060(1) as applicable.

NOTE: This rule was moved verbatim from OAR 340-244-9015 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040
Stats. Implemented: ORS 468A.025, & 468A.040
Hist.: DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9015

340-245-9020

Colored Art Glass Manufacturing Facility Rules; Permit Required

- (1) Not later than December 1, 2016, if located within the Portland AQMA, and not later than April 1, 2017, if located outside the Portland AQMA, all CAGMs not otherwise subject to a permitting requirement must apply for a permit under OAR 340-216-8020 Table 2, Part B, category #84.
- (2) A CAGM that applies for a permit on or before the required date is not in violation of OAR 340-216-0020(3).
- (3) CAGMs constructed after September 1, 2016 must obtain a permit prior to construction.

NOTE: This rule was moved verbatim from OAR 340-244-9020 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040
Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9020

340-245-9030

Colored Art Glass Manufacturing Facility Rules; Requirements That Apply To Tier 2 CAGMs

(1) Tier 2 CAGMs located within the Portland AQMA may not use raw materials containing arsenic, cadmium, chromium, lead, manganese or nickel except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(2) Effective January 1, 2017, Tier 2 CAGMs located within the Portland AQMA may not use raw materials containing selenium except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(3) Tier 2 CAGMs located outside the Portland AQMA may not use raw materials containing arsenic, cadmium or chromium VI except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

(4) Effective April 1, 2017, Tier 2 CAGMs located outside the Portland AQMA may not use raw materials containing chromium, lead, manganese, nickel or selenium except in glassmaking furnaces that use an emission control device that meets the requirements of OAR 340-245-9070.

NOTE: This rule was moved verbatim from OAR 340-244-9030 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9030

NOTE: OAR 340-244-9040 was not moved to this division. This note to be deleted in the version that goes to the Secretary of State.

340-245-9050

Colored Art Glass Manufacturing Facility Rules; Requirements That Apply To Tier 1 CAGMs

(1) No later than October 1, 2016, if located within the Portland AQMA, and April 1, 2017, if located outside the Portland AQMA, each Tier 1 CAGM must comply with subsection (a) or (b) for each glassmaking furnace or group of glassmaking furnaces that use raw material containing arsenic, cadmium, chromium, lead, manganese or nickel:

(a) Install an emission control device that meets the emission control device requirements in OAR 340-245-9070; or

(b) Request a permit condition that prohibits the use of arsenic, cadmium, chromium, lead, manganese or nickel in the glassmaking furnace or group of glassmaking furnaces, and comply with that condition.

(2) No later than January 1, 2017, if located within the Portland AQMA, and April 1, 2017, if located outside the Portland AQMA, each Tier 1 CAGM must comply with subsection (a) or (b) for each glassmaking furnace or group of glassmaking furnaces that use raw material containing selenium:

(a) Install an emission control device that meets the emission control device requirements in OAR 340-245-9070; or

(b) Request a permit condition that prohibits the use of selenium in the glassmaking furnace or group of glassmaking furnaces, and comply with that condition.

NOTE: This rule was moved verbatim from OAR 340-244-9050 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9050

340-245-9060

Colored Art Glass Manufacturing Facility Rules; Operating Restrictions That Apply To Tier 1 CAGMs

(1) Tier 1 CAGMs may not use raw materials that contain chromium VI in any uncontrolled glassmaking furnace.

(2) Tier 1 CAGMs are not restricted on the raw materials that may be used in glassmaking furnaces that are controlled by an emission control device approved by DEQ.

NOTE: This rule was moved verbatim from OAR 340-244-9060 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9060

340-245-9070

Colored Art Glass Manufacturing Facility Rules; Emission Control Device Requirements

(1) CAGMs must comply with the requirements in subsection (a) or (b), as applicable, for each emission control device used to comply with this rule.

(a) Tier 1 CAGMs must comply with one of the requirements in paragraphs (A), (B) or (C):

(A) Conduct a source test as required under section (3) and demonstrate that the emission control device does not emit particulate matter in excess of 0.005 grains per dry standard cubic foot as measured by EPA Method 5 or an equivalent method approved by DEQ.

(B) If the emission control system is a fabric filter (baghouse), install a bag leak detection system that meets the requirements of section (4).

(C) If the emission control system is a fabric filter (baghouse), install an afterfilter that meets the requirements of section (5).

(b) Tier 2 CAGMs must:

(A) Conduct a source test as required under section (3) and demonstrate that the emission control device does not emit particulate matter in excess of 0.005 grains per dry standard cubic foot as measured by EPA Method 5 or an equivalent method approved by DEQ; and

(B) If a fabric filter (baghouse) is used, install either a bag leak detection system that meets the requirements of section (4) or an afterfilter that meets the requirements of section (5).

(2) Emission control device requirements:

(a) A CAGM must obtain DEQ approval of the design of all emission control devices before installation, as provided in this rule.

(b) A CAGM must submit a Notice of Intent to Construct as required by OAR 340-210-0205 through 340-210-0250 no later than 15 days before the date installation begins. If DEQ does not deny or approve the Notice of Intent to Construct within 10 days after receiving the Notice, the Notice will be deemed to be approved.

(c) Emission control devices may control emissions from more than one glassmaking furnace.

(d) Each emission control device must be equipped with the following monitoring equipment:

- (A) An inlet temperature monitoring device;
 - (B) A differential pressure monitoring device if the emission control device is a baghouse; and
 - (C) Any other monitoring device or devices specified in DEQ's approval of the Notice of Intent to Construct.
- (e) Each emission control device must be equipped with inlet ducting that provides the following:
- (A) Sufficient cooling of exhaust gases to no more than the maximum design inlet temperature under worst-case conditions; and
 - (B) Provision for inlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.
 - (f) Each emission control device must be equipped with outlet ducting that provides for outlet emissions testing, including sufficient duct diameter, sample ports, undisturbed flow conditions, and access for testing.
 - (g) After commencing operation of any emission control device, the CAGM must monitor the emission control device as required by OAR 340-245-9080.
- (3) If source testing is conducted under section (1), the CAGM must perform the following source testing on at least one emission control device.
- (a) Within 60 days of commencing operation of the emission control devices, test control device outlet for particulate matter using DEQ Method 5 or equivalent method;
 - (b) The emission control device to be tested must be approved by DEQ;
 - (c) A source test plan must be submitted at least 30 days before conducting the source test; and
 - (d) The source test plan must be approved by DEQ before conducting the source test.
- (4) If a bag leak detection system is installed under section (1), the requirements for the bag leak detection system are:
- (a) The bag leak detection system must be installed and operational as soon as possible but not more than 90 days after the baghouse becomes operational or 90 days after the effective date of the rule, whichever is later.
 - (b) Each bag leak detection system must meet the specifications and requirements in paragraphs (A) through (H).

(A) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.

(B) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator must continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(C) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (D), and the alarm must be located such that it can be heard by the appropriate plant personnel.

(D) In the initial adjustment of the bag leak detection system, the CAGM must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.

(E) Following initial adjustment, the CAGM may not adjust the averaging period, alarm set point, or alarm delay time without approval from DEQ except as provided in paragraph (F).

(F) Once per quarter, the CAGM may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by OAR 340-224-9080(4).

(G) The CAGM must install the bag leak detection sensor downstream of the fabric filter.

(H) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

(5) If an afterfilter is installed under section (1), the requirements for the afterfilter are:

(a) The afterfilter must be installed and operational as soon as possible but not more than 120 days after the baghouse becomes operational or 120 days after the effective date of the rule, whichever is later;

(b) The afterfilter must filter the entire exhaust flow from the fabric filter (baghouse); and

(c) The afterfilter must be equipped with:

(A) HEPA filters that have a Minimum Efficiency Reporting Value of 17 (MERV 17) or higher per American National Standards Institute (ANSI) Standard 52.2; and

(B) A differential pressure monitoring device.

NOTE: This rule was moved verbatim from OAR 340-244-9070 and renumbered and amended.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 6-2016(Temp), f. & cert. ef. 5-6-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9070

340-245-9080

Colored Art Glass Manufacturing Facility Rules; Emission Control Device Monitoring

(1) Each Tier 1 CAGM must perform the following monitoring on each emission control device it uses to comply with this rule:

(a) At least once each week, observe and record the inlet temperature and the fabric filter (baghouse) differential pressure and afterfilter differential pressure (as applicable); and

(b) At least once every 12 months:

(A) Inspect the ductwork and emission control device housing for leakage;

(B) Inspect the interior of the emission control device for structural integrity and, if a fabric filter (baghouse) is used, to determine the condition of the fabric filter; and

(C) Record the date, time and results of the inspection.

(2) Each Tier 2 CAGM must perform the following monitoring on each emission control device used to comply with this rule:

(a) At least once each day, observe and record the inlet temperature and the fabric filter (baghouse) differential pressure and afterfilter differential pressure (as applicable); and

(b) At least once every 12 months:

(A) Inspect the ductwork and emission control device housing for leakage;

(B) Inspect the interior of the emission control device for structural integrity and, and if a fabric filter (baghouse) is used, to determine the condition of the fabric filter; and

(C) Record the date, time and results of the inspection.

(3) CAGMs must observe and record any parameters specified in a DEQ approval of the Notice of Intent to Construct applicable to a control device.

(4) If a bag leak detection system is used, the CAGM must develop and submit to DEQ for approval a site-specific monitoring plan for each bag leak detection system. The CAGM must

operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in subsections (a) through (f).

- (a) Installation of the bag leak detection system;
- (b) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;
- (c) Operation of the bag leak detection system, including quality assurance procedures;
- (d) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;
- (e) How the bag leak detection system output will be recorded and stored; and
- (f) Corrective action procedures as specified in section (5). In approving the site-specific monitoring plan, DEQ may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.

(5) For each bag leak detection system, the CAGM must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in subsection (4)(f), the CAGM must alleviate the cause of the alarm within 3 hours of the alarm by taking all necessary corrective actions. Corrective actions may include, but are not limited to the following:

- (a) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
- (b) Sealing off defective bags or filter media;
- (c) Replacing defective bags or filter media or otherwise repairing the control device;
- (d) Sealing off a defective fabric filter compartment;
- (e) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; and
- (f) Shutting down the process producing the PM emissions.

(6) For each bag leak detection system, the CAGM must keep the following records:

- (a) Records of the bag leak detection system output;

(b) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and

(c) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the alarm was alleviated within 3 hours of the alarm.

NOTE: This rule was moved verbatim from OAR 340-244-9080 and renumbered.

Stat. Auth.: ORS 468.020, 468A.025, & 468A.040

Stats. Implemented: ORS 468A.025, & 468A.040

Hist.: DEQ 4-2016(Temp), f. & cert. ef. 4-21-16 thru 10-17-16; DEQ 10-2016, f. & cert. ef. 10-3-16, Renumbered from 340-244-9080

NOTE: OAR 340-244-9090 was not moved to this division. This note to be deleted in the version that goes to the Secretary of State.